



# **REMEDIAL ACTION QUARTERLY MONITORING REPORT**

## **SECOND QUARTER – 2006 (12 of 120)**

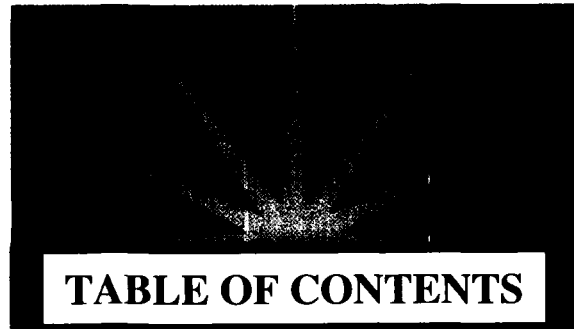
### **SKINNER LANDFILL SITE BUTLER COUNTY WEST CHESTER, OHIO**

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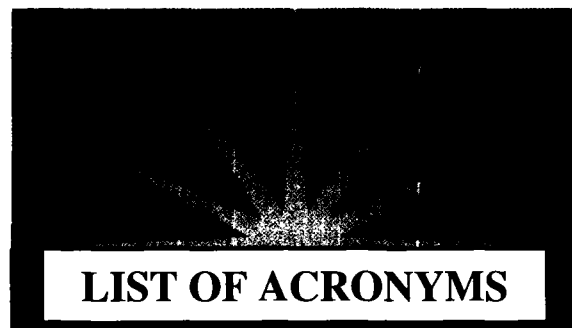
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## **LIST OF ACRONYMS**

AMP	Air Monitoring Plan
AOC	Administrative Order on Consent
ARAR	Applicable or Relevant and Appropriate Requirements
BMR	Baseline Monitor Report
BCDES	Butler County Department of Environmental Services
bgs	Below Ground Surface
BZ	Breathing Zone
CD&D	Construction Debris and Demolition Waste
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGI	Combustible Gas Indicator
CHSD	Corporate Health and Safety Director
CIP	Construction Implementation Plan
CLP	Contract Laboratory Program
cm/sec	Centimeters Per Second
CO	Carbon Monoxide
CP	Contingency Plan
CQA	Construction Quality Assurance
CQAC	Construction Quality Assurance Consultant
CRZ	Contamination Reduction Zone
CRQL	Contract Required Quantitation Limit
CSDI	Contaminated Soils Design Investigation
CY	Cubic Yard
CZ	Control Zone
DSW	Division of Surface Water (OEPA)
DSR	Division Safety Representative
EPA	Environmental Protection Agency
EZ	Exclusion Zone
FID	Flame Ionization Detector
FML	Flexible Membrane Liner (low density polyethylene)
FSP	Field Sampling Plan
FTB	Film Tearing Bond
ft	Feet
ft/sec	Feet Per Second
GCL	Geosynthetic Clay Layer
GCAL	Gulf Coast Analytical Laboratories Inc.
GIS	Groundwater Interceptor System
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWDI	Groundwater Design Investigation
HAP	Hazardous Air Pollutant
HASP	Health and Safety Plan
HDPE	High-Density Polyethylene
HSM	Health and Safety Manager
IDLH	Immediately Dangerous to Life or Health

IRM	Interim Remedial Measures
kg/d	Kilograms Per Day
lb/day	Pounds Per Day
LEL	Lower Explosion Limit
LF	Lineal Feet
LLDPE	Linear Low-Density Polyethylene
μ	Micron
μg/l	Microgram per Liter
MSL	Mean Sea Level
NIOSH	National Institute for Occupational Safety and Health
NO <sub>x</sub>	Oxides of Nitrogen
NWI	National Wetland Inventory
O <sub>3</sub>	Ozone
OAC	Ohio Administrative Code
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
ORC	Ohio Revised Code
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PLC	Programmable Logic Controller
PM-10	Particulate Matter less than 10 microns
PRP	Potentially Responsible Party
PPE	Personal Protective Equipment
psi	Pounds Per Square Inch
PQL	Practical Quantitation Limit
QAPP	Quality Assurance Project Plan
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RA	Remedial Action
RD	Remedial Design
RHSS	Regional Health & Safety Specialist
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager (USEPA)
RPO	Resident Project Observer
SI	Site Inspection
SF	Square Feet
SLWG	Skinner Landfill Work Group
SO <sub>2</sub>	Sulfur Dioxide
SOP	Standard Operating Procedure
SOW	Statement of Work
SPCC	Spill Prevention Control and Counter Measure Plan
SSO	Site Safety Officer
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
SZ	Support Zone

TAL	Target Analyte List
TCL	Target Compound List
TDH	Total Dynamic Head
TLV	Threshold Limit Values
TSS	Total Suspended Solids
TWA	Time Weighted Average
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
VOC	Volatile Organic Compound
yr	Year
WBGT	Wet Bulb Globe Temperature
WZ	Work Zone

## **1.0 INTRODUCTION**

### **1.1 GENERAL INFORMATION**

This quarterly monitoring report was prepared for the Skinner Landfill Superfund Site located in West Chester, Butler County, Ohio in accordance with the Operation and Maintenance - Long-Term Performance Plan (O&M-LTP Plan) dated August 2003. The O&M-LTP Plan was prepared to meet the requirements of the Record of Decision (ROD) dated June 4, 1993, the Statement of Work (SOW) dated April 6, 1994, the 100% Final Remedial Design dated June 21, 1996 and the Consent Decree dated April 7, 2001.

The remedial action (RA) post-construction O&M monitoring period began with the third quarter of 2003 and extends for a period of 30 years. This report documents the results of groundwater and surface water monitoring conducted during the second quarter of 2006, which is the 12th of 120 quarterly sampling events to be conducted during the 30-year monitoring period.

### **1.2 SITE LOCATION AND DESCRIPTION**

Skinner Landfill is located approximately 15 miles north of Cincinnati, Ohio near West Chester, Butler County, Ohio in Township 3, Section 22, Range 2. The site is located along Cincinnati-Dayton Road, as shown in Figure 1. The site is bordered on the south by the East Fork of Mill Creek, on the north by wooded land, on the east by a Norfolk Southern Railway Company right-of-way, and on the west by a gravel driveway.

The site is located in a highly dissected area that slopes from a till-mantled-bedrock upland to a broad, flat-bottomed valley that is occupied by the main branch of Mill Creek. Elevations on the site range from a high of nearly 800 feet above mean sea level (MSL) in the northeast, to a low of 645 feet above MSL near the confluence of Skinner Creek and East Fork of Mill Creek. Both Skinner Creek and the East Fork of Mill Creek are small, intermittent shallow streams. Both of these streams flow to the southwest from the site toward the main branch of Mill Creek.

In general, the site is underlain by relatively thin glacial drift over inter-bedded shale and limestone of Ordovician age. The composition of the glacial drift ranges from intermixed silt, sand and gravel, to silty sandy clays with a thickness ranging from zero to over forty feet. The sand and gravel deposits comprise the hills and ridges and are encountered near the surface of the central portion of the site. The silts and clays usually occur as lenses in the sands and gravel or directly overlie bedrock.

### **1.3 SITE HISTORY AND BACKGROUND**

The property was originally developed as a sand and gravel mining operation and was subsequently used as a landfill from 1934 to 1990. According to USEPA studies, materials deposited at the site include demolition debris, household refuse and a wide variety of chemical wastes. The waste disposal areas include a now buried former waste lagoon near the center of the site and a landfill. According to USEPA studies, the buried lagoon was used for the disposal of paint wastes, ink wastes, creosote, pesticides, and other chemical wastes. The landfill area, located north and northeast of the buried lagoon, received predominantly demolition and landscaping debris.

In 1976, the Ohio EPA (OEPA) initiated an investigation of the site. In 1982, the site was placed on the National Priority List by the USEPA based on information obtained during a limited investigation of the

site. A Phase II Remedial Investigation was conducted from 1989 to 1991 and involved further investigation of groundwater, surface water, soils and sediments. Both a Baseline Risk Assessment and Feasibility Study (FS) were completed in 1992.

The Phase II Remedial Investigation revealed that the most contaminated media at the site is the soil in the buried waste lagoon. Migration of the landfill constituents has been limited, and the Phase II Remedial Investigation concluded that there had been no off-site migration of landfill constituents via groundwater flow.

In the Record of Decision (ROD), dated June 4, 1993, the USEPA selected a remedy for the site consisting of multi-media capping of the landfill and the buried waste lagoon, and collection and treatment of the groundwater. The ROD also required an investigation to determine the feasibility for soil vapor extraction (SVE) in the granular soil adjacent to the buried lagoon.

The Remedial Design (RD) Investigation performed in 1994 was implemented to collect data required to assess the feasibility of the SVE and to design the multi-media cap and the groundwater extraction/treatment systems. The Remedial Design was submitted to USEPA on June 21, 1996 outlining the cover design and groundwater interception system design. Based on the RD investigation, the installation of an SVE system was determined to be unfeasible.

Construction of a groundwater interception system (GIS) and engineered landfill cover system began in April 2001 and was substantially completed in September 2001. The USEPA conducted the pre-final construction inspection on September 27, 2001, the final construction inspection on March 27, 2003 and the second 5-Year Review on January 22, 2004.

## **2.0 SAMPLING METHODS**

This quarterly monitoring event was conducted in general accordance with the following documents shown with the date of the USEPA-approved final version:

- Operation and Maintenance - Long-Term Performance Plan (O&M-LTP Plan) dated August 2003, and
- RA Health and Safety Plan, Final February 2001.

There were no deviations from these work plans.

## **3.0 RESULTS**

### **3.1 GROUNDWATER LEVELS**

The groundwater elevation data obtained from the monitor wells, piezometers and selected gas probes is presented on Table 1 with the corresponding potentiometric surface map provided in Appendix A. The groundwater hydraulic gradient calculated from data collected was 0.09 ft/ft. The average hydraulic gradient documented in the Remedial Action Baseline Monitoring Report, dated March 2005, is calculated to be 0.13 ft/ft.

### **3.2 GROUNDWATER-WASTE MONITORING**

Results of the piezometer groundwater levels used to monitor the groundwater levels relative to bottom of waste are provided on Table 2. Based on measured water levels, groundwater has been lowered below the waste elevation during this monitoring event at piezometer P-12, which is one of the piezometers furthest from Duck Pond. Depth to water measurements could not be recorded from piezometers P-9, P-10 and P-11 due to an obstruction or possible pinching of the well casing.

### **3.3 GROUNDWATER ANALYTICAL RESULTS**

A summary of target compound list (TCL) and target analyte list (TAL) parameter concentrations encountered above the contract required quantitation limit (CRQL) and revised modified trigger level is provided on Table 3. A summary of the laboratory analytical results have been presented on a per well basis in Appendix B to assist in identifying temporal detection patterns. A report of each data set reduction, validation and assessment procedure conducted on an analytical-set basis in accordance with the O&M-LTP Plan quality assurance project plan (QAPP) is included in Appendix C.

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in groundwater above the CRQL.

During the previous groundwater monitoring event, samples collected from groundwater monitoring wells GW-61, GW-62B and from GW-64 contained concentrations of 2-butanone that exceeded the CRQL. However, during the most recent groundwater monitoring event, concentrations of 2-butanone were not detected at these sample locations.

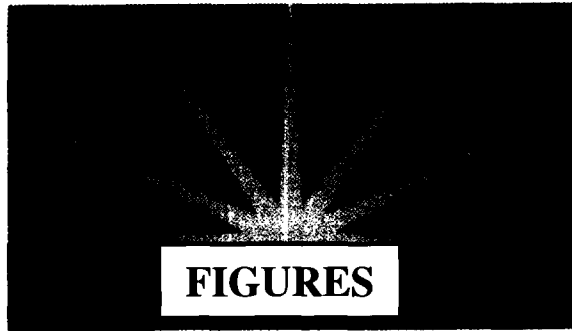
Two of the 24 TAL parameters that have a corresponding trigger level were detected above the CRQL. Concentrations of barium and iron were detected in the groundwater samples collected from monitoring wells GW-06R and 58. Iron was also detected in the samples collected from groundwater monitoring wells GW-61 and GW-63. The barium and iron concentrations exceed the CRQL at these locations, but do not exceed the revised modified trigger levels.

### **3.4 SURFACE WATER ANALYTICAL RESULTS**

Surface water analyzed consisted of surface water collected directly from the East Fork of Mill Creek. Surface water runoff samples for the Site were not able to be collected during this quarter due to an inadequate water flow. On June 20 and 23, 2005, visits were made to the site after qualifying rain fall events. However, the sample locations did not yield the necessary volume of water to collect samples.

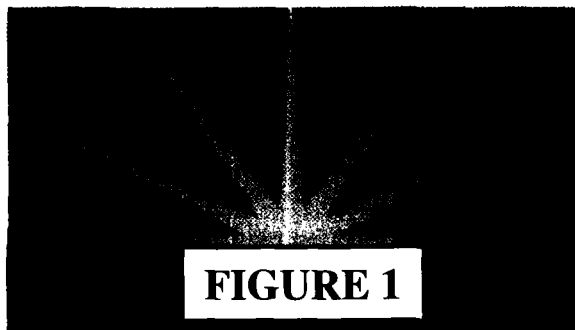
A summary of TCL and TAL parameter concentrations encountered above the CRQL and revised modified trigger level is provided on Table 4. A summary of surface water laboratory analytical results is presented in Appendix B. The summary tables are presented on a sample location basis. The validated laboratory analytical data is provided in Appendix C

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in surface water above the CRQL. None of the 24 TAL parameters, that have a corresponding trigger level, were detected above the CRQL.



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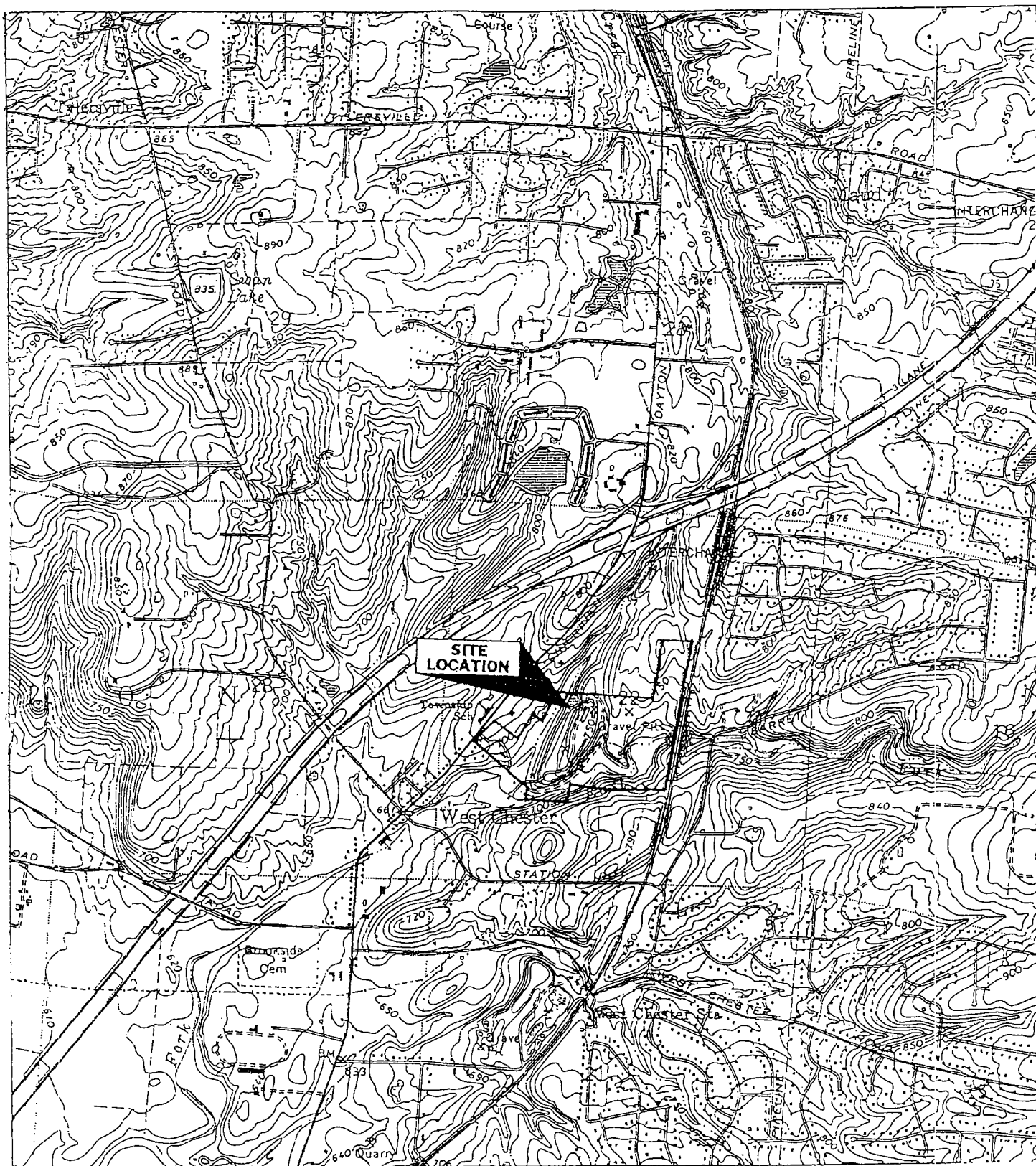
**FIGURES**



## SITE VICINITY MAP

FIGURE 1





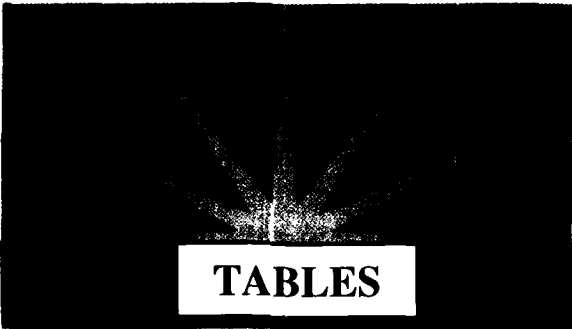
Base taken from USGS Glendale, Ohio  
7.5' Topographic Quadrangle, photorevised 1987



EARTH TECH



SKINNER LANDFILL  
SITE VICINITY MAP  
BUTLER COUNTY, OHIO





## GROUNDWATER ELEVATIONS

**TABLE 1**  
**Groundwater Elevation Summary**  
**Skinner Landfill**  
**West Chester, Ohio**

					June 13, 2006	
Well Type	Location	Well Use	Ground Surface Elevation (MSL-feet)	Top of Casing Elevation (MSL-feet)	Depth to Water (feet from top of casing)	Groundwater Elevation (MSL-feet)
Piezometers	P-1	G	685.42	687.65	10.87	676.78
	P-2	G	688.54	690.42	12.91	677.51
	P-3R	G	691.83	693.69	25.28	668.41
	P-4	G	700.32	702.63	6.90	695.73
	P-5	G	708.20	710.65	14.14	696.51
	P-6	G	707.45	710.59	12.20	698.39
	P-7	G	719.08	721.83	Dry	Dry
	P-8	G	747.70	749.91	30.50	719.41
	P-9	G	760.68	763.90	--	--
	P-10	G	761.34	764.16	--	--
	P-11	G	760.34	762.76	--	--
	P-12	G	743.50	746.17	40.60	705.57
Groundwater Monitoring Wells	GW-06R	S	683.89	685.91	10.11	675.80
	GW-07R	S	683.46	683.06	7.68	675.38
	GW-24	G	693.32	695.21	18.95	676.26
	GW-26	G	696.61	698.28	30.06	668.22
	GW-30	G	675.63	677.62	9.94	667.68
	GW-58	S	684.03	686.53	13.56	672.97
	GW-59	S	684.35	687.38	7.44	679.94
	GW-60	S	689.12	692.38	13.65	678.73
	GW-61	S	687.38	690.86	13.55	677.31
	GW-62A	S	690.19	692.38	30.84	661.54
	GW-62B	S	690.57	693.13	12.36	680.77
	GW-63	S	698.87	702.50	10.32	692.18
	GW-64	S	700.45	703.88	12.23	691.65
	GW-65	S	703.83	706.88	16.79	690.09
	GW-66	G	686.82	689.41	8.14	681.27
Gas Probes	GP-6	G	772.18	774.65	15.48	759.17
	GP-7	G	749.83	752.65	9.40	743.25

Notes:

MSL - Mean Sea Level

G - Gauging

S - Sampling and Gauging

-- No Gauging Data Available (well constricted)



**GROUNDWATER/WASTE  
ELEVATIONS**

**TABLE 2**  
**Groundwater-Waste Monitoring Summary**  
**Skinner Landfill**  
**West Chester, Ohio**

Piezometer	Depth to Waste (feet)	Bottom of Waste Elevation (MSL-feet)	Baseline Water Elevation (June 2001) (feet)	Water Elevation (September 2005) (feet)	Water Elevation (December 2005) (feet)	Water Elevation (March 2006) (feet)	Water Elevation (June 2006) (feet)
P-9	25	737	745.00	-	-	-	-
P-10	30	734	744.50	-	-	-	-
P-11	17	745	744.30	734.01	-	-	-
P-12	35	707	713.50	704.74	704.98	706.25	705.75

Notes:

Waste elevations determined during piezometer installation on June 28 and 29, 2001.

Shaded cells indicate water level elevations below the elevation of waste.

- No gauging data available (well constricted).



## **GROUNDWATER RESULTS SUMMARY**

**TABLE 3**

Table 3

Groundwater Summary

Skinner Landfill  
West Chester, Ohio  
Second Quarter 2006

Sample ID	VOCs	SVOCs	Dissolved Metals**	Pesticides/PCBs
GW-06R	-	-	<i>Barium, Iron</i>	-
GW-07R	-	-	-	-
GW-58	-	-	<i>Barium, Iron</i>	-
GW-59	-	-	-	-
GW-60	-	-	*	-
GW-61	-	-	<i>Iron</i>	-
GW-62A	-	-	-	-
GW-62B	*	*	*	*
GW-63	-	-	<i>Iron</i>	-
GW-64	-	-	-	-
GW-65	*	*	*	*

- all parameters below report limits

*italic* - above Contract Required Quantitation Levels (CRQL's)

**bold** - above trigger level

\* - Insufficient sample volume.

\*\* - Dissolved metals for analytes that have a corresponding trigger level.





## **SURFACE WATER RESULTS SUMMARY**

**TABLE 4**

**Table 4**

**Surface Water Summary**

**Skinner Landfill  
West Chester, Ohio  
Second Quarter 2006**

<b>Sample ID</b>	<b>VOCs</b>	<b>SVOCs</b>	<b>Dissolved Metals**</b>	<b>Pesticides/PCBs</b>
<b>SW-50</b>	-	-	-	-
<b>SW-51</b>	-	-	-	-
<b>SW-52</b>	-	-	-	-
<b>SWD-1</b>	*	*	*	*
<b>SWD-2</b>	*	*	*	*
<b>SWD-3</b>	*	*	*	*

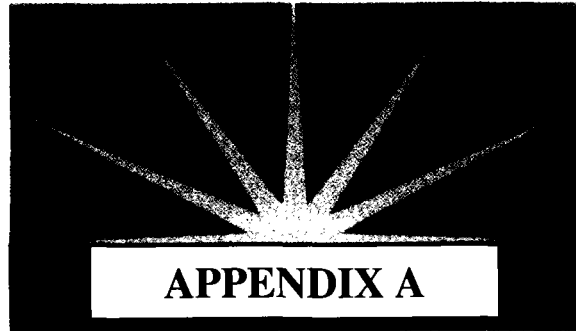
- all parameters below report limits

*italic - above Contract Required Quantitation Levels (CRQL's)*

**bold - above trigger level**

\* - Insufficient sample volume.

\*\* - Dissolved metals for analytes that have a corresponding trigger level.



## **POTENTIONMETRIC SURFACE MAP**

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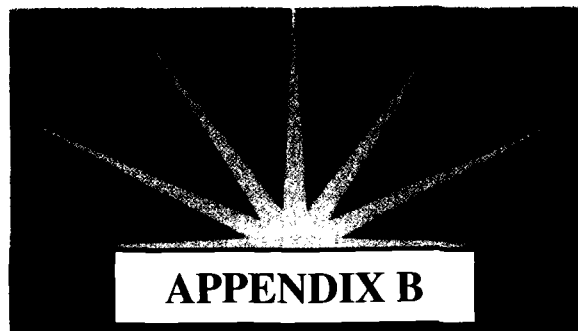
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APPENDIX A – POTENTIOMETRIC SURFACE MAP

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## **SUMMARY OF ANALYTICAL RESULTS**

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-06R**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>								
Aluminum	55.3	32.4	16.4	12.5	16.4	14.8		200
Antimony	3.9	5.4	4.0 UJ	2.7 UJ	4.0	4.0	60	60
Arsenic	6.1 J	3.8	4.2	3.5	3.8	4.0	20	10
Barium	196	253	205	168	161 J	212	1,000	200
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5	5
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	5	5
Calcium	186,000	199,000	172,000	194,000	203,000	175,000		5,000
Chromium	1.5	1.5	1.4	4.6	1.3	2.1	11	10
Cobalt	0.7	1.1	0.6	4.6	1.9	1.2		50
Copper	1.2	0.7	0.7	0.8	0.7	1.4	25	25
Iron	9.1	10.5	27.4	442 J	53.9	193	7,000	100
Lead	2.4 UJ	1.4	1.4	1.7	1.4 UJ	1.8	4.2	3
Magnesium	31,700	34,000	28,300	36,400	33,800	30,400		5,000
Manganese	173	224	147	662	155 J	275		15
Mercury	0.1 UJ	0.1	0.1	0.1 J	0.1	0.1	0.2	0.2
Nickel	1.1	0.4	1.1	2.3	0.6	0.6	96	40
Potassium	2,200	2,680	2,710 J	3,040	2,390 J	2,420		5,000
Selenium	4.4 R	3.5 UJ	3.5 UJ	3.0	3.5 R	4.9 UJ	8.5	5
Silver	0.9	1.1	2.9	0.6	1.1	1.0 UJ	10	10
Sodium	21,000	22,800	20,300	23,900	25,800	19,300		5,000
Thallium	6.3	4.1	4.1 UJ	5.7	4.1	2.6	40	10
Vanadium	11.5	11.9	6.6	1.6	2.5	1.2		50
Zinc	4.6	12.1	1.1	9.6	3.3	0.7	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	8,510	7,510 J	27,800 J	5,730	2,950	5,720 J		
Antimony	7.6 J	11.5	4.0 UJ	2.7 UJ	4.0 UJ	4.0		
Arsenic	9.0 J	5.2	64.7	8.7	15.2	6.3		
Barium	338	397	626	250	329	329		
Beryllium	0.5	0.2	2.6	0.4	0.1	0.5		
Cadmium	0.3	0.1	0.6	0.1	0.1	0.1		
Calcium	234,000	263,000 J	562,000	251,000	223,000	210,000		
Chromium	11.1	9.7	63.8 J	15.9	8.1	11.9 J		
Cobalt	11.9	12.5	48.5	12.3	5.2	9.0		
Copper	18.7 J	17.3 J	113	15.2 J	6.8 J	4.1		
Cyanide	0.5	0.6	1.0	0.6	0.6	0.6	10	10
Iron	20,900	21,900 J	84,300	15,800	7,810	15,100		
Lead	13.6 J	14.8	67.5	14.4	3.5 J	12.8		
Magnesium	51,800	63,000 J	194,000	61,600	41,300	47,400		
Manganese	1,010	1,460 J	5,230	1,340	516	1,050		
Mercury	0.1 UJ	0.1	0.1	0.3 J	0.1 UJ	0.1		
Nickel	15.5	0.4	67.5	14.6 J	6.1 J	11.5		
Potassium	4,210	4,080	7,920 J	4,380	3,230 J	3,700 J		
Selenium	4.4 UJ	3.5 R	3.9	3.0	3.5 R	4.9		
Silver	0.9	1.1	12.6 J	0.6	1.1	1.0 UJ		
Sodium	20,400	23,700 J	23,300	24,900	25,200 J	19,500		
Thallium	6.3 UJ	4.1 UJ	4.1 UJ	5.2	4.6	2.6 UJ		
Vanadium	29.1 J	29.9 J	75.0 J	1.6	9.5	1.2		
Zinc	63.2	66.6	237 J	61.0 J	22.6 J	36.4 J		
<b>Volatile Organic Compounds (VOCs)</b>								
Carbon Disulfide	BRL	BRL	BRL	BRL	BRL	BRL		
Ethylbenzene	0.11 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.2	1.0
Toluene	0.74 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1,000	1.0
Xylene (total)	0.19 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10,000	1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Dibenz (a,h) anthracene	BRL	BRL	BRL	BRL	BRL	BRL		
Indeno (1,2,3-cd) pyrene		0.652 J	10.0 J	10.0 J	10.0 J	10.0 J	10	10
Di-n-butylphthalate		0.502 J	10.0 J	10.0 J	10.0 J	10.0 J	10	10
Benzo (g,h,i) perylene		1.02 J	10.0 J	10.0 J	0.571 J	10.0 J	190	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	10	10

**Notes:**

- 1) All results expressed in micrograms per liter (µg/l).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Monitoring Well GW-07R**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>			Insufficient Volume	Insufficient Volume				
Aluminum	55.3	24.0	—	—	16.4	14.8		200
Antimony	3.9	6.0	—	—	4.0	4.0	60	60
Arsenic	5.4	3.8	—	—	5.0	4.0	20	10
Barium	94.7	111	—	—	94.0 J	138	1,000	200
Beryllium	0.2	0.1	—	—	0.1	0.5	5	5
Cadmium	0.3	0.1	—	—	0.1	0.1	5	5
Calcium	173,000	191,000	—	—	172,000	190,000		5,000
Chromium	2.4	32.8	—	—	1.8	1.3	11	10
Cobalt	0.6	0.6	—	—	2.3	1.2		50
Copper	1.2	0.7	—	—	0.7	1.4	25	25
Iron	10.5	56.1	—	—	1,680	12.9	7,000	100
Lead	2.4 UJ	1.4	—	—	1.4 UJ	1.8	4.2	3
Magnesium	26,700	29,400	—	—	25,100	29,900		5,000
Manganese	398	908	—	—	600 J	2,090		15
Mercury	0.1 UJ	0.1	—	—	0.1	0.1	0.2	0.2
Nickel	1.5	0.4	—	—	1.4	4.2	96	40
Potassium	2,380	2,400	—	—	1,780 J	2,610		5,000
Selenium	4.4 R	3.5 UJ	—	—	3.5 R	4.9 UJ	8.5	5
Silver	0.9	1.1	—	—	1.1	1.0 UJ	10	10
Sodium	24,900	26,600	—	—	26,700	28,300		5,000
Thallium	6.3	4.1	—	—	6.3	2.6	40	10
Vanadium	9.1	11.0	—	—	1.8	1.2		50
Zinc	11.3	14.3	—	—	1.1	0.7	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	9,090	23,300 J	—	—	4,030	8,110 J		
Antimony	10.7 J	18.6	—	—	4.0 UJ	4.0		
Arsenic	5.4	7.6	—	—	21.8	9.6		
Barium	405	1,120	—	—	185	388		
Beryllium	0.4	1.1	—	—	0.1	0.5		
Cadmium	0.3	0.1	—	—	0.1	0.1		
Calcium	222,000	293,000 J	—	—	197,000	248,000		
Chromium	12.5	44.2	—	—	8.7	12.8 J		
Cobalt	6.4	17.8	—	—	4.4	9.3		
Copper	23.1 J	50.8 J	—	—	9.4 J	11.1		
Cyanide	0.6	0.6	—	—	2.2	1.3	10.0	10.0
Iron	22,000	63,600 J	—	—	9,710 J	24,600		
Lead	7.1 J	29.5	—	—	3.4	11.5		
Magnesium	42,300	73,000 J	—	—	34,600	49,400		
Manganese	913	2,340 J	—	—	761	2,940		
Mercury	0.1 UJ	0.1	—	—	0.1 UJ	0.1		
Nickel	16.0	28.1	—	—	7.6 J	16.8		
Potassium	4,300	5,940	—	—	2,770 J	4,400 J		
Selenium	4.4 UJ	3.5 R	—	—	3.5 R	4.9		
Silver	0.9	1.1	—	—	1.1	1.0 UJ		
Sodium	26,200	27,500 J	—	—	27,100 J	27,600		
Thallium	6.3 UJ	4.1 UJ	—	—	5.2	2.6 UJ		
Vanadium	23.5 J	47.0 J	—	—	9.7	1.2		
Zinc	59.4	146	—	—	24.7 J	46.5 J		
<b>Volatile Organic Compounds (VOCs)</b>								
Carbon Disulfide	BRL	BRL	BRL	BRL	BRL	BRL		
Toluene	0.69 J	1.0 J	1.0 J	1.0 U	1.0 U	1.0 U	1,000	1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Diethylphthalate	BRL	BRL	—	—	BRL	BRL		
Pesticides / PCBs	BRL	BRL	—	—	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-58**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL
CRQL							
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>							
Aluminum	55.3	16.4	16.4	12.5	16.4	14.8	200
Antimony	3.9	4.0	4.0 UJ	2.7 UJ	4.0	4.0	60
Arsenic	5.4 J	3.8	3.8	3.5	3.8	4.0	20
Barium	157	151.0	161	175	213 J	230	1,000
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	5
Calcium	108,000	114,000	103,000	124,000	130,000	101,000	5,000
Chromium	1.5	0.8	0.8	4.1	0.8	2.7	11
Cobalt	1.1	0.6	0.6	0.8	6.0	0.7	50
Copper	1.2	0.7	0.7	0.8	0.7	1.4	25
Iron	49.4	10.5	80.3	2.9 J	164	826	7,000
Lead	2.4 UJ	1.4	1.4	1.7	1.4 UJ	1.8	4.2
Magnesium	33,200	34,500	32,000	35,400	44,900	34,700	5,000
Manganese	265	84.7	52.6	13.3	232	187	15
Mercury	0.1 UJ	0.1	0.1	0.1 UJ	0.3	0.1	0.2
Nickel	1.2	0.4	0.4	0.6	1.9	1.0	96
Potassium	4,270	4,110	4,540 J	4,620	6,010 J	5,160	5,000
Selenium	4.4 R	3.5 UJ	3.5 UJ	3.0	3.5 R	4.9 UJ	8.5
Silver	0.9	1.1	2.6	0.6	1.1	2.0	10
Sodium	29,700	30,600	30,800	29,800	44,700	36,700	5,000
Thallium	6.3	4.1	4.1 UJ	8.2	4.1	2.6	40
Vanadium	11.1	11.7	5.9	1.6	0.7	1.2	50
Zinc	2.6	10.1	1.1	10.4	10.2	0.7	86
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	31,900	17,600 J	20,700 J	25,600	15,400	14,100 J	
Antimony	21.7 J	14.6	4.0 UJ	2.7 UJ	4.0 UJ	4.0	
Arsenic	19.6 J	6.8	29.1	20.2	61.6 J	11.6	
Barium	474	364	349	430	349	298	
Beryllium	1.8	0.8	1.2	1.7	0.8	0.8	
Cadmium	0.3	0.1	0.1	0.1	0.7	0.1	
Calcium	345,000	277,000 J	287,000	353,000	264,000	240,000 J	
Chromium	64.0	34.4	57.5 J	62.7	38.3	30.8	
Cobalt	32.2	16.4	17.6	27.1	14.5	12.9	
Copper	77.6 J	41.5 J	61.7	60.3 J	32.3 J	15.1	
Cyanide	0.5	0.6	0.8	0.6	1.0	0.6	10
Iron	80,500	45,400 J	49,700	68,200	41,700	33,500	
Lead	45.3 J	20.7	25.5	41.4	21.1	19.8	
Magnesium	86,600	73,800 J	72,300	87,600	72,300	62,000	
Manganese	1,970	1,300 J	1,250	1,820	1,140 J	920	
Mercury	0.1 UJ	0.1	0.1	0.7 J	0.1 UJ	0.1	
Nickel	73.4	17.8	55.6 J	63.2 J	37.3 J	30.1	
Potassium	11,500	8,380	10,900	10,100	9,500 J	7,900 J	
Selenium	4.4 UJ	3.5 R	3.5 UJ	3.0	3.5 R	4.9	
Silver	0.9	1.1	9.3	2.9	4.3 J	1.0 UJ	
Sodium	31,500	34,700 J	31,600	30,100	43,000 J	29,200	
Thallium	6.3 J	4.1 UJ	4.1 UJ	5.6	8.2 J	2.6 UJ	
Vanadium	59.4 J	38.0 J	45.8 J	11.5	30.3	1.2	
Zinc	224	128	147 J	195	123 J	83.9 J	
<b>Volatile Organic Compounds (VOCs)</b>							
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5
<b>Semi-Volatile Organic Compounds (SVOCs)</b>							
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	
Endrin Aldehyde						0.00110 J	
Heptachlor Epoxide						0.00230 J	

**Notes:**

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
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- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) = No Sample Available (Well Dry)
- 7) = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-59**

Sampling Event (All Results Expressed in Units of µg/l)									
Quarterly Results									
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL	
<b><u>Inorganics - Metals (Dissolved)<sup>13</sup></u></b>									
Aluminum	55.3	16.4	16.4	12.5	16.4	14.8		200	
Antimony	6.9	7.7	4.0 UJ	2.7 UJ	4.0	4.0	60	60	
Arsenic	5.4	3.8	3.8	3.5	3.8	4.0	20	10	
Barium	21.1	24.6	50.0	51.6	42.1 J	38.7	1,000	200	
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5	5	
Cadmium	0.3	0.1	0.1	0.1	0.2	0.1	5	5	
Calcium	236,000	240,000	173,000	179,000	192,000	188,000		5,000	
Chromium	1.5	0.8	0.8	4.0	0.8	3.2	11	10	
Cobalt	0.6	0.6	0.6	0.6	0.6	0.7		50	
Copper	1.2	0.7	0.8	0.8	0.7	1.4	25	25	
Iron	9.1	10.5	10.5	2.9	10.5	12.9	7,000	100	
Lead	2.4 UJ	1.4	1.4	1.7	1.4 UJ	1.8	4.2	3	
Magnesium	53,900	54,600	32,800	32,400	34,100	38,500		5,000	
Manganese	0.6	0.1	0.2	24.9	26.7 J	4.4		15	
Mercury	0.1 UJ	0.1	0.1	0.1 J	0.1	0.1	0.2	0.2	
Nickel	1.1	0.4	0.4	0.4	1.1	0.8	96	40	
Potassium	19,200	23,200	27,500 J	18,700	19,600 J	22,900		5,000	
Selenium	4.4 R	3.5 UJ	3.5 UJ	3.0	3.5 R	4.9 UJ	8.5	5	
Silver	0.9	1.1	3.2	0.6	1.1	1.0 UJ	10	10	
Sodium	135,000	151,000	96,600	74,900	72,000	101,000		5,000	
Thallium	6.3	4.1	4.1	8.4	4.1	2.6	40	10	
Vanadium	16.0	16.0	6.5	1.6	0.6	1.2		50	
Zinc	13.3	12.5	1.1	13.4	2.7	0.7	86	20	
<b><u>Inorganics - Metals and Cyanide (Total)</u></b>									
Aluminum	7,180	2,390 J	1,410 J	3,420	1,060	3,210 J			
Antimony	13.7 J	7.2	4.0 UJ	2.7 UJ	60.0 UJ	4.0			
Arsenic	5.4	4.1	8.8	6.4	14.3 J	4.0			
Barium	328	85.2	72.5	83.2	54.2	91.9			
Beryllium	0.3	0.1	0.1	0.3	5.0	0.5			
Cadmium	1.5	0.1	0.1	0.1	0.4	0.1			
Calcium	275,000	238,000 J	177,000	201,000	200,000	206,000			
Chromium	28.7	30.7	5.5 J	14.2	10.0	12.1 J			
Cobalt	13.1	4.7	1.5	4.2	1.4	4.4			
Copper	18.4 J	5.0 J	6.6	9.3 J	3.4 J	1.4			
Cyanide	0.6	0.6	0.6	0.6	2.5	0.8	10	10	
Iron	23,600	10,500 J	4,990	11,500	3,710	8,240			
Lead	8.6 J	2.4	2.6	9.4	3.0 UJ	6.3			
Magnesium	61,100	56,000 J	34,300	36,400	37,100	41,100			
Manganese	1,680	566 J	236	543	280 J	573			
Mercury	0.1 UJ	0.1	0.1	0.2 J	0.2 UJ	0.1			
Nickel	32.7	0.4	4.9 J	12.0 J	5.3 J	11.3			
Potassium	22,000	22,500	25,900	18,800	19,600 J	25,300 J			
Selenium	4.4 UJ	3.5 R	3.5 UJ	3.0	5.0 R	4.9			
Silver	0.9	1.1	2.7	0.6	10.0	1.0 UJ			
Sodium	143,000	148,000 J	93,900	75,700	79,100 J	105,000			
Thallium	6.3 UJ	4.1 UJ	4.1 UJ	6.3	4.3 J	2.6 UJ			
Vanadium	25.1 J	19.5 J	9.9 J	1.6	1.7	1.2			
Zinc	68.0	36.0	13.1 J	50.1 J	11.3 J	20.1 J			
<b><u>Volatile Organic Compounds (VOCs)</u></b>									
1,1-Dichloroethane	1.0 U	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U		1.0	
Carbon Disulfide			3.5	0.15 J	1.0 U	1.0 U		1.0	
<b><u>Semi-Volatile Organic Compounds (SVOCs)</u></b>									
	BRL	BRL	BRL	BRL	BRL	BRL			
<b><u>Pesticides / PCBs</u></b>									
	BRL	BRL	BRL	BRL	BRL	BRL			

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Monitoring Well GW-60**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>			Insufficient Volume	Insufficient Volume		Insufficient Volume		
Aluminum	55.3	50.4	—	—	16.4	—		200
Antimony	11.0	4.0	—	—	4.0	—	60	60
Arsenic	5.4	4.5	—	—	5.9 J	—	20	10
Barium	48.7	18.7	—	—	58.9 J	—	1,000	200
Beryllium	0.2	0.1	—	—	0.1	—	5	5
Cadmium	0.3	0.1	—	—	0.1	—	5	5
Calcium	299,000	137,000	—	—	210,000	—		5,000
Chromium	1.5	5.1	—	—	0.8	—	11	10
Cobalt	0.6	0.6	—	—	0.6	—		50
Copper	1.2	0.7	—	—	0.7	—	25	25
Iron	58.5	10.5	—	—	10.5	—	7,000	100
Lead	2.4 UJ	1.4	—	—	1.4 UJ	—	4.2	3
Magnesium	61,600	30,100	—	—	44,200	—		5,000
Manganese	1.7	0.9	—	—	0.1	—		15
Mercury	0.1 UJ	0.1	—	—	0.1	—	0.2	0.2
Nickel	1.1	0.4	—	—	0.8	—	96	40
Potassium	8,350	6,810	—	—	7,950 J	—		5,000
Selenium	4.4 R	3.5 UJ	—	—	3.5 R	—	8.5	5
Silver	0.9	1.1	—	—	1.1	—	10	10
Sodium	74,800	20,300	—	—	29,900	—		5,000
Thallium	6.3	4.1	—	—	4.1	—	40	10
Vanadium	16.7	11.3	—	—	0.6	—		50
Zinc	7.0	9.9	—	—	1.1	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	18,300	74,200 J	—	—	16,700	—		
Antimony	5.3 J	36.7	—	—	4.0 UJ	—		
Arsenic	5.4	3.8	—	—	55.6 J	—		
Barium	111	181	—	—	117	—		
Beryllium	1.0	4.3	—	—	0.9	—		
Cadmium	0.3	0.1	—	—	0.6	—		
Calcium	342,000	568,000 J	—	—	281,000	—		
Chromium	33.4	106	—	—	33.0	—		
Cobalt	19.2	77.6	—	—	14.7	—		
Copper	25.3 J	83.7 J	—	—	21.7 J	—		
Cyanide	—	—	—	—	2.5	—	10	10
Iron	42,400	160,000 J	—	—	38,500	—		
Lead	20.6 J	78.7	—	—	16.7 J	—		
Magnesium	73,500.0	86,700 J	—	—	58,900	—		
Manganese	1,960.0	4,340 J	—	—	1,150 J	—		
Mercury	0.1 UJ	0.2	—	—	0.1 UJ	—		
Nickel	34.8	105	—	—	32.7 J	—		
Potassium	12,600	19,100	—	—	11,900 J	—		
Selenium	4.4 UJ	3.5 R	—	—	3.5 R	—		
Silver	0.9	1.1	—	—	3.1 J	—		
Sodium	78,600	19,500 J	—	—	32,000 J	—		
Thallium	6.3 UJ	4.1 UJ	—	—	13.1 J	—		
Vanadium	39.8 J	103 J	—	—	30.1	—		
Zinc	116	391	—	—	88.3 J	—		
<b>Volatile Organic Compounds (VOCs)</b>								
Benzene	1.0 J	0.083 J	—	1.0 U	1.0 U	1.0 U	5	1.0
Carbon disulfide	1.0 U	1.0 U	—	0.14 J	1.0 U	1.0 U		1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Di-n-butylphthalate	BRL	BRL	—	—	1.04 J	11.5 U	190	10
<b>Pesticides / PCBs</b>								
	BRL	BRL	—	—	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Monitoring Well GW-61**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>				Well is Dry				
Aluminum	55.3	16.4	16.4	—	16.4	14.8		200
Antimony	5.7	7.6	4.0 UJ	—	4.0	4.0	60	60
Arsenic	12.9 J	3.8	3.8	—	3.8	4.0	20	10
Barium	35.2	46.3	70.7	—	0.2	46.6	1,000	200
Beryllium	0.2	0.1	0.1	—	0.1	0.5	5	5
Cadmium	0.3	0.1	0.1	—	0.1	0.1	5	5
Calcium	183,000	211,000	228,000	—	335	237,000		5,000
Chromium	1.5	0.8	14.4	—	0.8	3.8	11	10
Cobalt	0.9	1.4	0.6	—	0.7	1.2		50
Copper	1.2	0.7	2.6	—	0.7	1.4	25	25
Iron	32.1	122	169	—	159	641	5,000	100
Lead	2.4 UJ	1.4	1.4	—	1.4 UJ	1.8	4.2	3
Magnesium	33,500	45,800	39,800	—	63,100	49,000		5,000
Manganese	713	953	217	—	0.3 J	617		15
Mercury	0.1 UJ	0.1	0.1	—	0.1	0.1	0.2	0.2
Nickel	2.0	0.4	9.2	—	0.4	3.5	96	40
Potassium	6,540	7,010	10,400 J	—	54.2	6,730		5,000
Selenium	4.4 R	3.5 UJ	3.5 UJ	—	3.5 R	4.9 UJ	8.5	5
Silver	0.9	1.1	3.2	—	1.1	1.0	10	10
Sodium	24,800	35,400	34,300	—	46.3	41,300		5,000
Thallium	6.3	4.1	4.1 UJ	—	4.1	2.6	40	10
Vanadium	9.3	12.9	6.2	—	0.6	1.2		50
Zinc	7.0	13.7	1.1	—	1.1	0.7	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	4,610	5,930 J	602 J	—	1,780	3,800 J		
Antimony	6.2 J	10.4	4.0 UJ	—	4.0 UJ	4.0		
Arsenic	7.6 J	8.8	7.5	—	14.3 J	5.3		
Barium	79.7	101.0	75.7	—	70.1	81.3		
Beryllium	0.2	0.2	0.1	—	0.1	0.5		
Cadmium	0.3	0.1	0.1	—	0.5	0.1		
Calcium	222,000	233,000 J	230,000	—	347,000	250,000		
Chromium	8.5	9.1	1.2 J	—	1.9	10.1 J		
Cobalt	4.7	6.4	1.1	—	1.9	4.1		
Copper	9.5 J	11.6 J	5.0	—	4.6 J	1.4		
Cyanide	0.5	0.6	0.6	—	1.6	0.6	10	10
Iron	13,500	18,200 J	2,070	—	6,770	11,100		
Lead	2.4 UJ	8.3	1.4	—	1.4 UJ	14.4		
Magnesium	44,500	51,700 J	39,800	—	65,900	53,600		
Manganese	923	1,110 J	224	—	317 J	750		
Mercury	0.1 UJ	0.1	0.1	—	0.1 UJ	0.1		
Nickel	10.9	0.4	4.7 J	—	8.0 J	11.2		
Potassium	8,380	8,270	10,600	—	9,210 J	7,550 J		
Selenium	4.4 UJ	3.5 R	3.5 UJ	—	3.5 R	4.9		
Silver	0.9	1.1	2.6	—	1.1	1.0 UJ		
Sodium	27,800	33,500 J	33,800	—	41,300	39,500		
Thallium	6.3 UJ	4.1 UJ	4.1 UJ	—	6.4 J	2.6 UJ		
Vanadium	18.2 J	21.8 J	8.5 J	—	4.4	1.2		
Zinc	37.8	54.3	14.6 J	—	21.8 J	25.4 J		
<b>Volatile Organic Compounds (VOCs)</b>								
2-Butanone	BRL	BRL	BRL	—	BRL	BRL		
Carbon disulfide	1.0 U	1.0 U	1.7	—	2.2 J	5.0 U	7.1	1.0
					1.0 U	1.0 U		1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Bis(2-Chloroethyl)ether	BRL	BRL	BRL	—	BRL	BRL		
Di-n-butylphthalate	10.4 U	0.535 J	10.0 J	—	10.0 U	10.0 U	13.6	10
					0.866 J	10.0 U	190	10
<b>Pesticides / PCBs</b>								
Dieldrin	BRL	BRL	BRL	—	BRL			
Heptachlor Epoxide			0.024 J	—	0.100 U	0.100 U		1.0
			0.028 J	—	0.050 U	0.00300 J		1.0

Notes:

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- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-62A**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>					Insufficient Volume			
Aluminum	1,180	36.6	16.4	22.3	—	20.8		200
Antimony	5.5	6.7	4.0	2.7 UJ	—	4.0	60	60
Arsenic	8.1 J	3.8	3.8 UJ	3.5	—	4.0	20	10
Barium	125	112	57.4	104	—	102	1,000	200
Beryllium	0.2	0.1	0.1	0.1	—	0.5	5	5
Cadmium	0.3	0.1	0.1	0.1	—	0.1	5	5
Calcium	133,000	133,000	92,600	133,000	—	127,000		5,000
Chromium	4.3	0.8	0.8	6.0	—	3.8	11	10
Cobalt	1.2	0.6	0.6	0.4	—	0.7		50
Copper	1.4	0.7	0.7	0.8	—	1.4	25	25
Iron	2,870	10.5	10.5	7.3 J	—	15.5	7,000	100
Lead	2.4 UJ	1.4	1.4	1.7	—	1.8	4.2	3
Magnesium	51,300	55,900	25,700	48,300	—	46,800		5,000
Manganese	239	65.0	11.9	32.3	—	29.5		15
Mercury	0.1 UJ	0.1	0.1	0.1 UJ	—	0.1	0.2	0.2
Nickel	5.1	0.4	0.5	1.1	—	0.9	96	40
Potassium	9,340	8,910	3,800 J	8,300	—	9,000		5,000
Selenium	4.4 R	3.5 UJ	3.5 UJ	3.0	—	4.9 UJ	8.5	5
Silver	0.9	1.1	1.4	0.6	—	1.0 UJ	10	10
Sodium	111,000	126,000	56,700	110,000	—	101,000		5,000
Thallium	6.3	4.1	4.1	5.4	—	2.6	40	10
Vanadium	15.2	16.0	5.6	1.6	—	1.2		50
Zinc	15.2	5.5	1.1	11.1	—	4.9	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	44,600	19,800 J	28,300	10,900	23,900	26,900 J		
Antimony	27.5 J	15.5	4.0	2.7 UJ	4.0 UJ	4.0		
Arsenic	5.4	4.5	31.1 J	6.9	80.5 J	8.6		
Barium	867	464	457	269	445	482		
Beryllium	2.2	0.9	1.8	0.7	1.2	1.4		
Cadmium	9.8	0.1	0.3	0.1	0.8	0.1		
Calcium	886,000	274,000 J	414,000	247,000	424,000	490,000		
Chromium	73.4	42.5	66.3	30.8	55.0	55.6 J		
Cobalt	51.5	20.5	29.1	11.4	22.8	30.7		
Copper	86.3 J	40.8 J	81.9	22.9 J	50.0 J	29.6		
Cyanide	—	0.6	0.7	0.6	—	0.6	10.0	10.0
Iron	99,000	48,000 J	64,200	26,900	59,200	64,400		
Lead	62 J	32.3	48.1	21.1	39.7 J	52.2		
Magnesium	107,000	79,000 J	107,000	71,000	104,000	99,500		
Manganese	5,270	1,430 J	2,210	896	2,130 J	2,620		
Mercury	0.1 UJ	0.1	0.1	0.3 J	0.1 J	0.1		
Nickel	101	15.8	66.5	27.5 J	59.3 J	68.4		
Potassium	18,700	13,200	17,500	11,000	15,000 J	14,000 J		
Selenium	4.4 UJ	3.5 R	3.5 R	3.0	3.5 R	5.0		
Silver	0.9	1.1	9.8	0.6	6.2 J	1.0		
Sodium	123,000	122,000 J	119,000	116,000	134,000 J	109,000		
Thallium	6.3 UJ	4.1 UJ	4.1	5.8	9.9 J	2.6 UJ		
Vanadium	72.9 J	42.8 J	56.5	1.6	45.2	269		
Zinc	324	150.0	219	88.9 J	171 J	184 J		
<b>Volatile Organic Compounds (VOCs)</b>								
Carbon Disulfide	BRL	BRL	BRL	BRL	BRL	BRL		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Di-n-butylphthalate	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Monitoring Well GW-62B**

Compound	Sampling Event (All Results Expressed in Units of µg/l)					TRIGGER LEVEL	CRQL
	Quarterly Results						
	June-05	September-05	December-05	March-06	June-06		
<u>Inorganics - Metals (Dissolved)</u> <sup>13</sup>	Well is Dry	Well is Dry	Well is Dry	Insufficient Volume	Well is Dry		
<u>Inorganics - Metals and Cyanide (Total)</u>	—	—	—	—	—		
<u>Volatile Organic Compounds (VOCs)</u>	—	—	—	BRL	—		
2-Butanone				4.4 J		7.1	1.0
1,1-Dichloroethane				1.0 J			1.0
<u>Semi-Volatile Organic Compounds (SVOCs)</u>	—	—	—	BRL	—		
Di-n-butylphthalate				0.898 J		190	10
<u>Pesticides / PCBs</u>	—	—	—	—	—		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-63**

Sampling Event (All Results Expressed in Units of µg/l)								
Quarterly Results								
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>								
Aluminum	55.3	31.7	322	14.9	16.4	16.3		200
Antimony	7.8	6.4	4.0	2.7 UJ	4.0	4.0	60	60
Arsenic	14.8 J	3.8	3.8 UJ	3.5	7.5 J	4.0	20	10
Barium	31.7	31.0	117	71.7	33.8	29.1	1,000	200
Beryllium	0.2	0.1	0.1	0.0	0.1	0.5	5	5
Cadmium	0.3	0.1	0.1	0.1	0.5	0.1	5	5
Calcium	286,000	245,000	141,000	291,000	279,000	173,000		5,000
Chromium	1.5	0.8	0.8	7.7	0.8	2.5	11	10
Cobalt	2.4	2.1	0.6	2.8	1.6	1.5		50
Copper	1.2	0.7	1.5	0.8	0.7	1.4	25	25
Iron	655	1,840	383	583 J	10.5	189	7,000	100
Lead	2.4 UJ	1.4	1.4	1.7	1.4 UJ	1.8	4.2	3
Magnesium	69,600	56,800	54,200	65,900	64,300	38,400		5,000
Manganese	1,530	1,980	120	2,290	481 J	1,200		15
Mercury	0.1 UJ	0.1	0.1	0.1 J	0.1	0.1	0.2	0.2
Nickel	1.6	0.4	1.7	3.8	3.2	2.1	96	40
Potassium	5,920	7,300	10,600 J	9,120	5,720 J	5,550		5,000
Selenium	4.4	3.5 J	3.5 UJ	3.0	3.5 R	4.9 UJ	8.5	5
Silver	0.9	1.1	2.4	0.6	1.1	1.0	10	10
Sodium	44,700	66,300	120,000	68,000	38,600	30,000		5,000
Thallium	6.3	4.1	4.1	7.7	4.1	2.6	40	10
Vanadium	16.5	14.7	6.8	1.6	0.9	1.2		50
Zinc	8.3	10.2	36.6	12.7	1.1	0.7	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>								
Aluminum	62,600	99,900 J	39,100	28,500	16,300	26,400 J		
Antimony	30.1 J	53.5	4.0	2.7 J	4.0 UJ	4.0		
Arsenic	5.4	3.8	40.9 J	14.9	56.3 J	15.5		
Barium	393	617	315	238	117	204		
Beryllium	3.5	5.3	3.0	1.8	1.1	1.4		
Cadmium	0.3	0.1	0.5	0.1	1.7	0.1		
Calcium	702,000	922,000 J	737,000	431,000	335,000	412,000		
Chromium	67.9	120	66.4	46.1	25.4	36.5 J		
Cobalt	60.7	99.3	43.8	29.4	14.2	26.2		
Copper	124 J	187 J	94.9	51.8 J	110 J	22.1		
Cyanide	0.5 U	0.6	0.8	0.6	1.5	0.7	10	10
Iron	141,000	223,000 J	88,300	63,600	37,000	56,900		
Lead	85.6 J	140	46.8	42.9	28.1 J	40.1		
Magnesium	157,000	184,000 J	118,000	102,000	81,600	96,100		
Manganese	5,660	8,490 J	6,100	3,820	1,590	3,250		
Mercury	0.1 J	0.2	0.1	1.1 J	0.1 UJ	0.1		
Nickel	119	171	85.4	60.1 J	35.4 J	51.5		
Potassium	15,200	22,000	19,000	13,500	8,690 J	12,400 J		
Selenium	17.2 J	3.5 R	3.5 R	3.0	3.5 R	4.9		
Silver	0.9	1.1	12.4	2.3	1.1	1.0 UJ		
Sodium	45,800	71,100 J	77,700	63,500	39,000 J	37,900		
Thallium	6.3 UJ	4.1 UJ	4.1	5.2	9.8	2.6 UJ		
Vanadium	90.7 J	1.0 J	72.7	11.4	27.8	12.6		
Zinc	403	637	233	188 J	311 J	148 J		
<b>Volatile Organic Compounds (VOCs)</b>								
Benzene	1.0 U	0.13 J	1.0 U	1.0 J	1.0 U	1.0 U	5	1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
Butylbenzylphthalate	0.771 J	1.07 J	12.2 UJ	10.0 U	10.0 U	10.0 U	10	10
<b>Pesticides / PCBs</b>								
Endosulfan sulfate					0.00856 UJ	0.100 U		1.0
4,4'-DDT						0.00220 J		1.0
Endrin Aldehyde						0.00350 J		1.0
Heptachlor Epoxide						0.00370 J		1.0

Notes:

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- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
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**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Monitoring Well GW-64**

	Sampling Event (All Results Expressed in Units of µg/l)							
	Quarterly Results							
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) <sup>13</sup>								
Aluminum	55.3	23.4	16.4	20.8	16.4	14.8		200
Antimony	3.9	5.8	4.0	2.7 UJ	4.0	4.0	60	60
Arsenic	5.4	3.8	3.8 UJ	3.5	5.8 J	4.0	20	10
Barium	29.6	32.1	64.6	41.5	39.4 J	35.0	1,000	200
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5	5
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	5	5
Calcium	182,000	181,000	234,000	173,000	207,000	163,000		5,000
Chromium	1.5	0.8	0.8	6.6	0.8	4.2	11	10
Cobalt	0.6	0.6	2.0	1.0	0.7	0.7		50
Copper	1.2	0.7	0.7	0.8	0.7	1.4	25	25
Iron	9.1	10.5	128	2.9	10.5	12.9	7,000	100
Lead	2.4 UJ	1.4	1.4	1.7	1.4 UJ	1.8	4.2	3
Magnesium	59,200	57,300	51,700	52,800	71,600	52,400		5,000
Manganese	863	115	1,970	469	783 J	25.0		15
Mercury	0.1 UJ	0.1	0.1	0.1 J	0.1	0.1	0.2	0.2
Nickel	5.1	0.4	3.5	4.5	9.0	3.0	96	40
Potassium	10,200	10,100	10,400 J	10,800	15,400 J	8,910		5,000
Selenium	4.4 R	3.5 UJ	3.5 UJ	3.0	3.5 R	4.9 UJ	8.5	5
Silver	0.9	1.1	1.7	0.6	1.1	1.0 UJ	10	10
Sodium	45,000	46,300	74,700	51,700	68,100	42,800		5,000
Thallium	6.3	4.1	4.1	9.8	4.1	2.6	40	10
Vanadium	13.4	15.8	6.2	1.6	1.2	1.2		50
Zinc	5.1	7.5	4.7	12.2	1.1	0.7	86	20
Inorganics - Metals and Cyanide (Total)								
Aluminum	15,800	66,200 J	23,500	31,500	8,050	6,580 J		
Antimony	12.0 J	33.4	4.0	2.7 UJ	4.0 UJ	4.0		
Arsenic	5.4	3.8	16.8	9.4	34.5 J	4.0		
Barium	66.6	174	109	111	67.9	58.2		
Beryllium	0.8	3.7	1.4	1.9	0.3	0.5		
Cadmium	0.3	0.1	0.1	0.1	0.3	0.1		
Calcium	249,000	441,000 J	267,000	333,000	241,000	194,000		
Chromium	22.7	93.8	44.3	53.7	15,400	13.5 J		
Cobalt	18.3	63.9	21.0	30.2	10.9	7.9		
Copper	18.2 J	66.4 J	37.3	36.5 J	9.0 J	1.4		
Cyanide	0.5	0.6	0.7	0.6	3.5	0.7	10	10
Iron	38,200	150,000 J	49,900	74,100	21,300	14,900		
Lead	11.0 J	58.9	13.5	27.1	5.8 J	6.8		
Magnesium	71,100	105,000 J	71,600	79,200	77,600	59,400		
Manganese	2,550	4,290 J	2,140	2,830	2,750 J	1,190		
Mercury	0.1 UJ	0.1	0.1	0.900 J	0.1 UJ	0.1		
Nickel	36.3	102	44.6	64,800 J	28.5 J	15.9		
Potassium	14,500	21,000	16,100	16,000	16,400 J	9,990 J		
Selenium	4.4 UJ	3.5 R	3.5	4.1	3.5 R	4.9		
Silver	0.9	1.1	7.0	3.4	1.1	1.0 UJ		
Sodium	49,600	46,300 J	45,100	51,800	65,500 J	41,400		
Thallium	6.3 UJ	4.1 UJ	4.1	5.2	7.0 J	2.6 UJ		
Vanadium	32.3 J	89.3 J	42.4	11.0	14.5	1.2		
Zinc	82.4	337	112	166	41.0 J	31.9 J		
Volatile Organic Compounds (VOCs)								
2-Butanone					2.3 J	5.0 U	7.1	1.0
Semi-Volatile Organic Compounds (SVOCs)								
Di-n-butylphthalate					0.729 J	10.0 U	190	10
Pesticides / PCBs								
	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Monitoring Well GW-65**

	Sampling Event (All Results Expressed in Units of µg/l)						
	Quarterly Results						
Compound	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>	Well is Dry	Insufficient Volume	Well is Dry	Insufficient Volume	Well is Dry		
Antimony	—	—	—	—	—	60	60
Arsenic	—	—	—	—	—	10	10
Barium	—	—	—	—	—	1,000	200
Beryllium	—	—	—	—	—	5	5
Cadmium	—	—	—	—	—	5	5
Chromium	—	—	—	—	—	11	10
Copper	—	—	—	—	—	25	25
Iron	—	—	—	—	—	5,000	100
Lead	—	—	—	—	—	4.2	3
Mercury	—	—	—	—	—	0.2	0.2
Nickel	—	—	—	—	—	96	40
Selenium	—	—	—	—	—	5	5
Silver	—	—	—	—	—	10	10
Thallium	—	—	—	—	—	40	10
Zinc	—	—	—	—	—	86	20
<b><u>Inorganics - Metals and Cyanide</u></b>							
<b><u>(Total)</u></b>							
Antimony	—	—	—	—	—		
Arsenic	—	—	—	—	—		
Barium	—	—	—	—	—		
Beryllium	—	—	—	—	—		
Cadmium	—	—	—	—	—		
Chromium	—	—	—	—	—		
Copper	—	—	—	—	—		
Cyanide	—	—	—	—	—	10	10
Iron	—	—	—	—	—		
Lead	—	—	—	—	—		
Mercury	—	—	—	—	—		
Nickel	—	—	—	—	—		
Selenium	—	—	—	—	—		
Silver	—	—	—	—	—		
Thallium	—	—	—	—	—		
Zinc	—	—	—	—	—		
<b><u>Volatile Organic Compounds (VOCs)</u></b>	—	BRL	—	BRL	—		
<b><u>Semi-Volatile Organic Compounds (SVOCs)</u></b>	—	—	—	—	—		
<b><u>Pesticides / PCBs</u></b>	—	—	—	—	—		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-50**

		Sampling Event (All Results Expressed in Units of µg/l)						
		Quarterly Results						
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) <sup>13</sup>								
Aluminum	55.3	25.2	16.4	25.1	16.4	14.8		200
Antimony	5.9	4.0	4.0	2.7	4.7	4.0	60	60
Arsenic	5.4	6.8	3.8 UJ	3.5	3.8 UJ	4.0	20	10
Barium	40.2	53.1	57.5	50.6	43.4	43.6	1,000	200
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5	5
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	5	5
Calcium	93,500	89,000	90,900	110,000	99,500	72,300		5,000
Chromium	1.5	5.4	0.8	3.8	3.0	1.8	11	10
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7		50
Copper	1.2	0.7	1.7	0.8	0.7	1.4	25	25
Iron	9.1	10.5	10.5	43.7	10.5	14.4	7,000	100
Lead	2.4 UJ	1.4 UJ	1.4	2.0	1.4 UJ	1.8	4.2	3
Magnesium	30,900	28,000	25,700	30,800	27,000	22,100		5,000
Manganese	0.9	7.4 J	3.5	0.1	4.4	1.9		15
Mercury	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Nickel	1.1	0.4 UJ	0.4	0.4	0.4	0.5	96	40
Potassium	1,870	3,460	3,960 J	3,110	1,620	2,860 J		5,000
Selenium	4.4 R	3.5 R	3.5 UJ	4.3	3.5 UJ	4.9 UJ	8.5	5
Silver	0.9	1.1	1.1	0.6	1.1	1.0	10	10
Sodium	90,000	53,000	54,200	100,000	37,700	45,900		5,000
Thallium	6.3 UJ	4.1	4.1	7.1	4.1	2.6	40	10
Vanadium	9.5	11.5	5.1	1.6	2.6	1.2		50
Zinc	3.7	8.3	1.1	11.1	7.9	1.3	86	20
Inorganics - Metals and Cyanide (Total)								
Aluminum	55.3	46.2	36.8	21.8	16.4	36.7		
Antimony	3.9	4.0	4.0	2.7	6.6	4.0		
Arsenic	5.4	7.2	3.8 UJ	3.5	3.8 UJ	4.0		
Barium	40.1	50.5	58.9	50.5	42.9	43.6		
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5		
Cadmium	0.3	0.1	0.1	0.1	0.4	0.1		
Calcium	92,900	85,200	91,800	108,000	104,000	72,200		
Chromium	1.5	29.8	0.8	4.8	2.9	1.8		
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7		
Copper	1.2	1.4	1.8	0.8	0.7	1.4		
Cyanide	0.6	0.6	0.6	0.6	1.5	0.6	10	10
Iron	15.0	132.0	13.3	24.3	10.5	19.3		
Lead	2.4 UJ	1.4 UJ	1.4	1.7	1.4 UJ	1.8		
Magnesium	30,200	26,500	26,300	30,500	27,800	22,100		
Manganese	1.2	10.4 J	5.4	0.1	1.4	3.3		
Mercury	0.1	0.1	0.1	0.1	0.1	0.1		
Nickel	1.1	0.4 UJ	0.4	0.6 U	0.4	0.5		
Potassium	1,760	3,310	3,950 R	2,910 J	1,600	2,880 J		
Selenium	4.4 R	3.5 R	3.5	3.0 UJ	3.5 UJ	4.9 UJ		
Silver	0.9	1.1	1.2	0.6	1.1	1.0		
Sodium	89,000	51,200	54,400	97,700	38,600	46,300		
Thallium	6.3	4.1	4.1	5.9	4.1	2.6		
Vanadium	9.7	11.8	4.3	1.6	2.1	1.2		
Zinc	1.7	7.1 J	9.8	6.0	6.6	1.3		
Volatile Organic Compounds (VOCs)		BRL	BRL	BRL	BRL	BRL		
Acetone	2.2 R	5.0 U	5.0 U	5.0 U	5.0 R	5.0 U		1.0
Chloroform	1.0 U	0.14 J	1.0 U	1.0 U	1.0 U	1.0 U	79	1.0
Semi-Volatile Organic Compounds (SVOCs)		BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs		BRL	BRL	BRL	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-51**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL
CRQL							
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>							
Aluminum	55.3	18.1	16.4	12.5	16.4	14.8	200
Antimony	3.9	4.0	4.0	2.7	4.0	4.0	60
Arsenic	5.4	8.7	3.8 UJ	3.5	3.8 UJ	4.0	20
Barium	41	48.6	0.2	49.5	42.1	48.3	1,000
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5
Cadmium	0.3	0.1	0.3	0.1	0.1	0.1	5
Calcium	95,500	94,700	53.9	10,800	101,000	83,100	5,000
Chromium	1.5	12.7	1.3	3.7	2.8	1.8	11
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7	50
Copper	1.2	0.7	0.7	0.8	0.7	1.4	25
Iron	9.1	35.3	10.5	2.9	10.5	12.9	7,000
Lead	2.4 UJ	1.4 UJ	1.4	1.7	1.4 UJ	1.8	4.2
Magnesium	31,500	29,400	13.0	29,400	27,100	23,500	5,000
Manganese	1.3	4.8 J	0.1	0.1	2.9	6.0	15
Mercury	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Nickel	1.1	0.4 UJ	1.2	0.4	0.4	0.6	96
Potassium	1,800	3,060	54.2	2,840 J	2,070	2,770 J	5,000
Selenium	4.4 R	3.5 R	3.5	3.0 UJ	3.5 R	4.9 UJ	8.5
Silver	0.9	1.1	1.1	0.6	1.1	1.0	10
Sodium	102,000	53,700	400	100,000	36,400	45,200	5,000
Thallium	6.3 UJ	4.1	4.1	6.5	4.1	2.6	40
Vanadium	9.5	13.2	0.6	1.6	2.3	1.2	50
Zinc	2.5	9.3	2.6	9.5	4.1	1.9	86
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	55.3	43.6	30.1	21.2	16.4	36.2	
Antimony	3.9	4.0	4.0	2.7	4.0	4.0	
Arsenic	5.4	9.1	3.8 UJ	3.5	3.8 UJ	4.0	
Barium	40.0	50.4	52.0	50.3	41.9	48.2	
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	
Calcium	90,500	95,300	87,300	108,000	101,000	82,800	
Chromium	1.5	7.6	0.8	3.9	3.3	2.0	
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7	
Copper	1.2	0.7	0.9	0.8	0.7	1.4	
Cyanide	0.6	0.6	0.6	8.0	0.6	0.6	10
Iron	28.6	27.9 U	45.0	30.2	57.4	55.9	
Lead	2.4 UJ	1.4 UJ	1.4	1.7	1.4 UJ	1.8	
Magnesium	29,800	30,600	24,600	30,400	27,300	23,600	
Manganese	2.4	5.4 J	7.4	0.1	5.5	7.7	
Mercury	0.1	0.1	0.1	0.1	0.1	0.1	
Nickel	1.1	0.4 UJ	0.4	0.4	0.4	0.5	
Potassium	1,760.0	3,080	3,610	2,840 J	1,690	2,810 J	
Selenium	4.4 R	3.5 R	3.5 R	3.0 UJ	3.5 UJ	4.9 UJ	
Silver	0.9	1.1	1.1	0.6	1.1	1.0	
Sodium	100,000	56,100	54,000	97,300	35,600	46,400	
Thallium	6.3	4.1	4.1	4.6	4.1	2.6	
Vanadium	9.2	12.9	5.1	1.6	2.0	1.2	
Zinc	2.4	4.8 J	1.1	8.4	5.8	0.7	
<b>Volatile Organic Compounds (VOCs)</b>							
Carbon Disulfide	BRL	BRL	BRL	BRL	BRL	0.47 J	1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>							
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-52**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	March-05	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL
CRQL							
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>							
Aluminum	55.3	30.0	16.4	12.5	16.4	15.7	200
Antimony	3.9	4.0	4.0	2.7	4.0	4.0	60
Arsenic	10.0 J	3.8	3.8 UJ	3.5	3.8 UJ	4.0	20
Barium	42.2	48.2	51.4	51.2	41.1	48.0	1,000
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	5
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	5
Calcium	97,600	94,500	86,800	10,300	99,500	83,100	5,000
Chromium	1.5	0.8	0.8	3.8	3.9	1.8	11
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7	50
Copper	1.2	0.7	1.3	0.8	0.7	1.4	25
Iron	9.1	10.5	10.5	2.9	10.5	12.9	7,000
Lead	2.4 UJ	1.4 UJ	1.4	1.7	1.4 UJ	1.8	4.2
Magnesium	31,500	26,100	24,900	29,800	27,100	23,200	5,000
Manganese	1.3	3.9 J	5.1	0.1	3.5	4.9	15
Mercury	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Nickel	1.1	0.4 UJ	0.4	0.4	0.4	0.5	96
Potassium	1,660	3,510	3,570 J	2,720 J	1,470	2,690 J	5,000
Selenium	4.4 R	3.5 R	3.5 UJ	3.0 UJ	3.5 UJ	4.9 UJ	8.5
Silver	0.9	1.1	1.3	0.6	2.0	1.0	10
Sodium	88,900	54,900	53,500	95,600	35,000	46,100	5,000
Thallium	6.3 UJ	4.1	4.1	5.1	4.1	2.6	40
Vanadium	9.8	10.9	4.8	1.6	2.0	1.2	50
Zinc	3.6	8.9	1.1	8.3	6.1	0.7	86
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	55.3	97.2	118	19.7	16.4	33.6	
Antimony	3.9	4.0	4.0	2.7	5.2	4.0	
Arsenic	9.8 J	3.9	3.8	3.5	3.8 UJ	4.0	
Barium	39.9	49.5	54.6	49.4	45.8	48.6	
Beryllium	0.2	0.1	0.1	0.1	0.1	0.5	
Cadmium	0.3	0.1	0.1	0.1	0.1	0.1	
Calcium	90,100	89,800	86,600	105,000	110,000	83,700	
Chromium	1.5	5.1	0.8	3.8	4.3	1.6	
Cobalt	0.6	0.6	0.6	0.4	0.6	0.7	
Copper	1.2	0.7	0.7	0.8	0.7	1.4	
Cyanide	0.6	0.6	0.8	0.6	2.2	0.6	10
Iron	24.2	38.3 U	147	34.3	46.3	49.3	
Lead	2.4 UJ	1.4 UJ	1.4	1.7	1.4 UJ	1.8	
Magnesium	28,700	25,600	23,700	29,100	29,900	23,100	
Manganese	1.5	7.6 J	22.0	1.2	6.6	7.8	
Mercury	0.1	0.1	0.1	0.1	0.1	0.1	
Nickel	1.1	0.4 UJ	0.4	0.4	0.4	0.5	
Potassium	1,580	3,400	3,570	2,710 J	1,830	2,780 J	
Selenium	4.4 R	3.5 R	3.5	3.0 UJ	7.5 J	4.9 UJ	
Silver	0.9	1.1	1.5	0.6	2.3	1.0	
Sodium	85,600	52,800	53,000	96,800	39,400	48,200	
Thallium	6.3	4.1	4.1	8.4	4.1	2.6	
Vanadium	9.9	10.9	4.5	1.6	1.9	1.2	
Zinc	0.7	5.6	1.1	8.3	5.0	6.2	
<b>Volatile Organic Compounds (VOCs)</b>							
Carbon Disulfide	BRL	BRL	BRL	BRL	BRL	BRL	
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Well Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-1**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>	Location is Dry	Location is Dry	Location is Dry		Location is Dry		
Aluminum	—	—	—	16.4	—		200
Antimony	—	—	—	4.0	—	60	60
Arsenic	—	—	—	3.8	—	20	10
Barium	—	—	—	24.5 J	—	1,000	200
Beryllium	—	—	—	0.1	—	5	5
Cadmium	—	—	—	0.1	—	5	5
Calcium	—	—	—	64,600 J	—		5,000
Chromium	—	—	—	0.8	—	11	10
Cobalt	—	—	—	0.6	—		50
Copper	—	—	—	0.7	—	25	25
Iron	—	—	—	10.5	—	7,000	100
Lead	—	—	—	1.4 UJ	—	4.2	3
Magnesium	—	—	—	10,700 J	—		5,000
Manganese	—	—	—	1.0	—		15
Mercury	—	—	—	0.1	—	0.2	0.2
Nickel	—	—	—	0.4	—	96	40
Potassium	—	—	—	4,250 J	—		5,000
Selenium	—	—	—	3.5 R	—	8.5	5
Silver	—	—	—	1.1	—	10	10
Sodium	—	—	—	2,260 J	—		5,000
Thallium	—	—	—	4.1	—	40	10
Vanadium	—	—	—	1.6	—		50
Zinc	—	—	—	34.8	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	—	—	—	560 J	—		
Antimony	—	—	—	4.0	—		
Arsenic	—	—	—	3.8	—		
Barium	—	—	—	29.2 J	—		
Beryllium	—	—	—	0.1	—		
Cadmium	—	—	—	0.1	—		
Calcium	—	—	—	69,600	—		
Chromium	—	—	—	1.9	—		
Cobalt	—	—	—	0.6	—		
Copper	—	—	—	1.7	—		
Cyanide	—	—	—	1.4	—	10	10
Iron	—	—	—	1,050 J	—		
Lead	—	—	—	1.4	—		
Magnesium	—	—	—	11,700	—		
Manganese	—	—	—	24.2 J	—		
Mercury	—	—	—	0.1	—		
Nickel	—	—	—	1.0	—		
Potassium	—	—	—	4,680 J	—		
Selenium	—	—	—	3.5 R	—		
Silver	—	—	—	1.1	—		
Sodium	—	—	—	2,300 J	—		
Thallium	—	—	—	4.1	—		
Vanadium	—	—	—	3.3	—		
Zinc	—	—	—	49.6	—		
<b>Volatile Organic Compounds (VOCs)</b>	—	—	—	BRL	—		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	—	BRL	—		
<b>Pesticides / PCBs</b>	—	—	—	BRL	—		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Location is Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

**Skinner Landfill**  
**West Chester, Ohio**  
**Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-2**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	June-05	September-05	September-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>	Location is Dry	Location is Dry	Location is Dry		Location is Dry		
Aluminum	—	—	—	17.5	—		200
Antimony	—	—	—	4.0	—	60	60
Arsenic	—	—	—	3.8	—	20	10
Barium	—	—	—	24.3 J	—	1,000	200
Beryllium	—	—	—	0.1	—	5	5
Cadmium	—	—	—	0.1	—	5	5
Calcium	—	—	—	65,300 J	—		5,000
Chromium	—	—	—	0.8	—	11	10
Cobalt	—	—	—	0.7	—		50
Copper	—	—	—	0.7	—	25	25
Iron	—	—	—	10.5	—	7,000	100
Lead	—	—	—	1.4	—	4.2	3
Magnesium	—	—	—	10,200 J	—		5,000
Manganese	—	—	—	1.0	—		15
Mercury	—	—	—	0.1	—	0.2	0.2
Nickel	—	—	—	0.5	—	96	40
Potassium	—	—	—	4,250 J	—		5,000
Selenium	—	—	—	3.5 R	—	8.5	5
Silver	—	—	—	1.1	—	10	10
Sodium	—	—	—	2,210	—		5,000
Thallium	—	—	—	4.1	—	40	10
Vanadium	—	—	—	1.4	—		50
Zinc	—	—	—	34.4	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	—	—	—	39.6 J	—		
Antimony	—	—	—	4.0	—		
Arsenic	—	—	—	3.8	—		
Barium	—	—	—	20.1 J	—		
Beryllium	—	—	—	0.1	—		
Cadmium	—	—	—	0.1	—		
Calcium	—	—	—	122,000	—		
Chromium	—	—	—	2.1	—		
Cobalt	—	—	—	0.6	—		
Copper	—	—	—	0.7	—		
Cyanide	—	—	—	0.6	—	10	10
Iron	—	—	—	35.6 J	—		
Lead	—	—	—	1.4	—		
Magnesium	—	—	—	33,200	—		
Manganese	—	—	—	1.7 J	—		
Mercury	—	—	—	0.1	—		
Nickel	—	—	—	0.6	—		
Potassium	—	—	—	2,270 J	—		
Selenium	—	—	—	3.5 R	—		
Silver	—	—	—	1.1	—		
Sodium	—	—	—	1,520 J	—		
Thallium	—	—	—	4.1	—		
Vanadium	—	—	—	3.0	—		
Zinc	—	—	—	1.1	—		
<b>Volatile Organic Compounds (VOCs)</b>	—	—	—	BRL	—		
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	—	BRL	—		
<b>Pesticides / PCBs</b>	—	—	—	BRL	—		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Location is Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

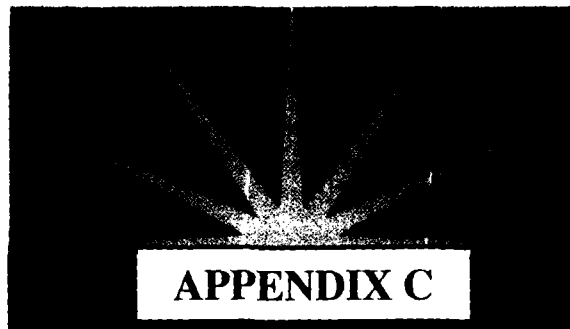


**Skinner Landfill  
West Chester, Ohio  
Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-3**

Sampling Event (All Results Expressed in Units of µg/l)							
Quarterly Results							
Compound	June-05	September-05	December-05	March-06	June-06	TRIGGER LEVEL	CRQL
<b>Inorganics - Metals (Dissolved)<sup>13</sup></b>	Location is Dry	Location is Dry			Location is Dry		
Aluminum	—	—	12.5	16.4	—		200
Antimony	—	—	2.7	4	—	60	60
Arsenic	—	—	3.5	3.8	—	20	10
Barium	—	—	14.8 J	21.3 J	—	1,000	200
Beryllium	—	—	0.1	0.1	—	5	5
Cadmium	—	—	0.1	0.1	—	5	5
Calcium	—	—	57,300	66,700 J	—		5,000
Chromium	—	—	1.7	0.8	—	11	10
Cobalt	—	—	0.4	0.6	—		50
Copper	—	—	1.8	0.7	—	25	25
Iron	—	—	2.9	10.5	—	7,000	100
Lead	—	—	1.7	1.4	—	4.2	3
Magnesium	—	—	10,900	12,900 J	—		5,000
Manganese	—	—	0.5	2.9	—		15
Mercury	—	—	0.1	0.1	—	0.2	0.2
Nickel	—	—	0.4	0.5	—	96	40
Potassium	—	—	3,570	3,980 J	—		5,000
Selenium	—	—	3.0	3.5 R	—	8.5	5
Silver	—	—	0.6	1.1	—	10	10
Sodium	—	—	2,730	3,960 J	—		5,000
Thallium	—	—	1.4	4.1	—	40	10
Vanadium	—	—	1.6	1.6	—		50
Zinc	—	—	5.6	1.1	—	86	20
<b>Inorganics - Metals and Cyanide (Total)</b>							
Aluminum	—	—	439	3,040 J	—		
Antimony	—	—	2.7	4.0	—		
Arsenic	—	—	3.5	3.8	—		
Barium	—	—	16.8 J	35.4 J	—		
Beryllium	—	—	0.1	0.1	—		
Cadmium	—	—	0.1	0.1	—		
Calcium	—	—	56,000	68,900	—		
Chromium	—	—	2.5	4.3	—		
Cobalt	—	—	0.4	1.4	—		
Copper	—	—	2.0	2.8	—		
Cyanide	—	—	0.6	0.8	—	10	10
Iron	—	—	757 J	3,730 J	—		
Lead	—	—	1.7	1.4	—		
Magnesium	—	—	10,400	14,000	—		
Manganese	—	—	22.6	81.6 J	—		
Mercury	—	—	0.1	0.1	—		
Nickel	—	—	0.4	3.3	—		
Potassium	—	—	3,670	4,680 J	—		
Selenium	—	—	3.0	3.5 R	—		
Silver	—	—	0.6	1.1	—		
Sodium	—	—	2,410	3,900 J	—		
Thallium	—	—	1.4	4.1	—		
Vanadium	—	—	1.6	6.2	—		
Zinc	—	—	13.4	12.1	—		
<b>Volatile Organic Compounds (VOCs)</b>	—	—	BRL	BRL	—		
Acetone	—	—		3.1 J	—		1.0
<b>Semi-Volatile Organic Compounds (SVOCs)</b>	—	—	BRL	BRL	—		
<b>Pesticides / PCBs</b>	—	—	BRL	BRL	—		
Heptachlor	—	—		0.010 J	—		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL).
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U, J, or UJ
- 6) — = No Sample Available (Location is Dry)
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



## LABORATORY DATA VALIDATION REPORT

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061713**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 29, 2006**  
**Data Validator: Mark Kromis**



## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. The results were reported by GCAL under Sample Delivery Group (SDG) 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171304	SK-SW50DUP-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018
20606171310	SK-SW50-1018 (DISS)
20606171311	SK-SW50MS-1018 (DISS)
20606171312	SK-SW50DUP-1018 (DISS)
20606171313	SK-SW51-1018 (DISS)
20606171314	SK-SW51DUPE-1018 (DISS)
20606171315	SK-SW-52-1018 (DISS)
20606171316	SK-SWEB-1018 (DISS)

## INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
  - A. Initial Calibration (IC)
  - B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis
8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

## **1. HOLDING TIMES**

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. CALIBRATION**

### **A. Initial Calibration**

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

### **B. Continuing Calibration**

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

## **3. BLANKS**

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

## **4. ICP INTERFERENCE CHECK SAMPLE**

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

## **5. LABORATORY CONTROL SAMPLES**

Recoveries were within the control limit (80-120%) for all constituents.

## **6. DUPLICATE ANALYSIS**

The laboratory used samples SK-SW50-1018 (total and dissolved fractions) for the duplicate samples. The Relative Percent Difference (RPD) between the sample and duplicate results for the total and dissolved fractions were within the acceptance criteria (<20%) for all target analytes.

## **7. SPIKE SAMPLE ANALYSIS**

The laboratory used sample SK-SW50-1018 (total and dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) with the exception Selenium (60%) in the dissolved fraction.

As per the National Functional Guidelines, if the percent recovery is greater than 30% but less than 75% qualify results greater than the IDL with "J" and non-detected results with "UJ".

## **8. ICP SERIAL DILUTION**

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The serial dilution percent differences were within the acceptance criteria for all target analytes with the exception of Potassium associated with the total fraction. As per the National Functional Guidelines, if the serial dilution %D exceeds the acceptance criteria then qualify results associated with that analyte as estimated with a "J".

## **9. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **10. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

## **11. OVERALL ASSESSMENT**

The percent recoveries for Silver in the Contract Required Detection Limit (CRDL) standards analyzed on 6/23/06 were 79, 81%, 82%, 82%, and 81%. As per the National Functional Guidelines, if the CRDL is below 80% then detected results are qualified as estimated with "J" and non-detected results with "UJ". The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various data qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## 2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV3. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

## 3. CALIBRATION

### A. Initial Calibration

One IC dated 6/21/06 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF for the IC's were within the acceptance criteria specified in the method for all target compounds.

### B. Continuing Calibration

One CC dated 6/21/06 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC's were within the acceptance criteria for the CC dated 6/21/06.

## 4. BLANKS

One laboratory semivolatile method blank and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### Method Blank (MB382003)

Bis-(2-ethylhexyl) phthalate (0.707 ppb) was detected in the blank extracted on 6/19/06.

### Equipment Blank (SK-SWEB -1018)

Bis-(2-ethylhexyl) phthalate (1.86 ppb) was detected in the Equipment Blank collected on 6/16/06. The Bis-(2-ethylhexyl) phthalate detected in the Equipment Blank was mitigated by the presence of Bis-(2-ethylhexyl) phthalate in the associated Method Blank.

## 5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds (SMC) were recovered within acceptable control limits.



**6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

Sample SK-SW50-1018 was submitted for MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol. As per the National Functional Guidelines no action is taken on MS/MSD data alone.

**7. INTERNAL STANDARDS PERFORMANCE**

Internal standard (IS) areas and Retention Times (RT) were within the acceptance limits for the reported semivolatile samples.

**8. COMPOUND IDENTIFICATION**

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

**9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

**10. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

**11. DOCUMENTATION**

There was no extraction date or preparation method listed on Form I SV-TIC. The analytical method reported by the GCAL on the Form I SV-TIC was listed as SW-846 8270C when it should have been listed as OLM04.2. The data validator manually made the corrections.

**12. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713  
VOLATILE ORGANIC**

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

## **1. HOLDING TIMES**

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## 2. GC/MS TUNING

The samples were analyzed one GC/MS system, identified as MSV0. Two bromofluorobenzene (BFB) tunes were run on MSV0. The BFB tunes are acceptable.

## 3. CALIBRATION

### A. Initial Calibration

One IC dated 6/20/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards is present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds.

The RRF's and the average RRF for the IC were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone associated with the IC dated 6/20/06. The %RSD's were within the acceptance criteria specified in the method for all target compounds.

### B. Continuing Calibration

One CC dated 6/21/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/21/06 were within the acceptance criteria for all target compounds with the exception of 1,2,4-Trichlorobenzene. The CC RRF's for the CC dated 6/21/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ". If the CC RF is less than the acceptance criteria then qualify detected results with "J" and non-detected results with "R".

## 4. BLANKS

One laboratory volatile method blank, storage blank, and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### MB382601

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/21/06 (1012).

#### Storage Blank (VHBLK)

There were no compounds detected above the Reporting Limit (RL) in the Storage Blank analyzed on 6/21/06.

#### Equipment Blank (SK-SWEB-1018)

Acetone (2.9 ppb) was detected in the Equipment Blank collected on 6/16/06.

### **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported volatile system monitoring compounds (SMC) were recovered within acceptable control limits (80%-120%).

### **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-SW50-1018 was submitted for the MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria. The RPD between the compounds were within the acceptance criteria.

### **7. LABORATORY CONTROL SAMPLE**

One Laboratory Control Sample was analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

### **8. INTERNAL STANDARDS PERFORMANCE**

Internal Standard (IS) areas and retention times were within acceptable limits for the reported volatile sample analyses.

### **9. COMPOUND IDENTIFICATION**

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

### **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for VOCs.

### **11. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

**12. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

**13. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 206061713 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were initially extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.



## 2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits. The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM).

The percent breakdown for both 4,4'-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4'-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

## 3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion for Individual standard mixtures A and B were within the acceptance criteria.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%. The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

## 4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows. The percent difference for each of the pesticides and surrogates in the PEM's were within the acceptance criteria of  $\pm 25.0$  percent for the calibration verifications.

The percent difference for each of the pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures A and B was within the acceptance criteria of  $\pm 25.0$  percent.

## 5. BLANKS

One laboratory method blanks and an Equipment blank were analyzed with this SDG. The results are summarized below.

### Method Blank 381997

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/19/06.

### Equipment Blank SK-SWEB-1018

No constituents were detected above the laboratory-reporting limit in the Equipment Blank collected on 6/16/06.

## **6. SURROGATE SPIKES**

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria (30% - 150%) for all samples except as follows:

SK-SWEB-1018                      TCX (26%)

As per the National Functional Guidelines, if recoveries are between 10 and 30 percent qualify results greater than the detection limit with "J" and non-detected results with "UJ".

## **7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-SW50-1018 was submitted for MS/MSD analysis. All of the percent recoveries associated with the MS/MSD were within the acceptance criteria with the exception of the following: Lindane associated with the MS/MSD, Aldrin and Heptachlor associated with the MSD. All of the RPD's between the MS/MSD were outside of the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

## **8. PESTICIDE CLEANUP CHECKS**

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

## **9. TARGET COMPOUND IDENTIFICATION**

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported.

## **11. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

## **12. OVERALL ASSESSMENT**

The results are acceptable as qualified by the data validator.

## **REFERENCES**

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review*.

US EPA, 1999. *National Functional Guidelines for Organic Data Review*.

## ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

**Report Date** 07/05/2006

**GCAL Report** 206061713

**RESUBMITTED**

**Deliver To** Earth Tech  
2373 Progress St  
Hebron, KY 41048  
859-442-2300

**Attn** Pat Higgins

**Customer** Earth Tech

**Project** Skinner Landfill

## **CASE NARRATIVE**

**Client:** Earth Tech      **Report:** 206061713

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **SEMI-VOLATILES MASS CHROMATOGRAPHY**

In the OLM04.2 Semivolatiles analysis for prep batch 326007, the MS/MSD exhibited sporadic recovery failures. All LCS/LCSD recoveries and RPDs were acceptable. This is attributed to matrix interference.

### **SEMI-VOLATILES GAS CHROMATOGRAPHY**

In the OLM04.2 - CLP Pest/PCB analysis for prep batch 326006, the MS/MSD exhibited recovery and RPD failures.

In the OLM04.2 - CLP Pest/PCB analysis, the recovery for the surrogate, Tetrachloro-m-xylene was outside the advisory limits for sample 20606171308 (SK-SWEB-1018). The recovery for this surrogate was acceptable on the second column. According to the method, no action is required for this failure.

### **METALS**

In the ILM04.1 - CLP Metals analysis for prep batch 326037, the MS and/or MSD recovery was outside the control limits for Selenium. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. The Sample/Duplicate RPD for Aluminum, Iron, Manganese and Zinc is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

## **ANALYTICAL RESULTS**

PERFORMED BY

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**Report Date** 07/05/2006

**GCAL Report** 206061713

**Deliver To** Earth Tech  
1455 Old Alabama Rd  
Suite 170  
Roswell, GA 30076  
770-990-1400

**Attn** Mark Kromis

**Customer** Earth Tech

**Project** Skinner Landfill



## **CASE NARRATIVE**

**Client:** Earth Tech      **Report:** 206061713

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **SEMI-VOLATILES MASS CHROMATOGRAPHY**

In the OLM04.2 Semivolatiles analysis for prep batch 326007, the MS/MSD exhibited sporadic recovery failures. All LCS/LCSD recoveries and RPDs were acceptable. This is attributed to matrix interference.

### **SEMI-VOLATILES GAS CHROMATOGRAPHY**

In the OLM04.2 - CLP Pest/PCB analysis for prep batch 326006, the MS/MSD exhibited recovery and RPD failures.

In the OLM04.2 - CLP Pest/PCB analysis, sample 20606171308 (SK-SWEB-1018) exhibited low surrogate recoveries in the primary analysis. This sample was re-extracted and analyzed with a similar surrogate recovery. This is attributed to matrix interference.

### **METALS**

In the ILM04.1 - CLP Metals analysis for prep batch 326037, the MS and/or MSD recovery was outside the control limits for Selenium. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. The Sample/Duplicate RPD for Aluminum, Iron, Manganese and Zinc is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

**ND** Indicates the result was Not Detected at the specified RDL  
**DO** Indicates the result was Diluted Out  
**MI** Indicates the result was subject to Matrix Interference  
**TNTC** Indicates the result was Too Numerous To Count  
**SUBC** Indicates the analysis was Sub-Contracted  
**FLD** Indicates the analysis was performed in the Field  
**PQL** Practical Quantitation Limit  
**MDL** Method Detection Limit  
**RDL** Reporting Detection Limit  
**00:00** Reported as a time equivalent to 12:00 AM

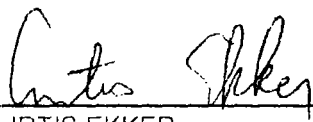
## Reporting Flags Utilized in this Report

**J** Indicates an estimated value  
**U** Indicates the compound was analyzed for but not detected  
**B** (ORGANICS) Indicates the analyte was detected in the associated Method Blank  
**B** (INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

  
\_\_\_\_\_  
CJRTIS EKKER  
DATA VALIDATION MANAGER  
GCAL REPORT 206061713

THIS REPORT CONTAINS 544 PAGES.

000003

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20606171301	SK-SW50-1018	Water	06/15/2006 14:50	06/17/2006 09:20
20606171302	SK-SW50MS-1018	Water	06/15/2006 15:00	06/17/2006 09:20
20606171303	SK-SW50MSD-1018	Water	06/15/2006 15:10	06/17/2006 09:20
20606171304	SK-SW50DUP-1018	Water	06/15/2006 15:10	06/17/2006 09:20
20606171305	SK-SW51-1018	Water	06/16/2006 08:10	06/17/2006 09:20
20606171306	SK-SW51DUPE-1018	Water	06/16/2006 08:20	06/17/2006 09:20
20606171307	SK-SW52-1018	Water	06/16/2006 08:35	06/17/2006 09:20
20606171308	SK-SWEB-1018	Water	06/16/2006 09:15	06/17/2006 09:20
20606171309	VHBLK	Water		06/17/2006 09:20
20606171310	SK-SW50-1018 (DISS)	Water	06/15/2006 14:50	06/17/2006 09:20
20606171311	SK-SW50MS-1018 (DISS)	Water	06/15/2006 15:00	06/17/2006 09:20
20606171312	SK-SW50DUP-1018 (DISS)	Water	06/15/2006 15:10	06/17/2006 09:20
20606171313	SK-SW51-1018 (DISS)	Water	06/16/2006 08:10	06/17/2006 09:20
20606171314	SK-SW51DUPE-1018 (DISS)	Water	06/16/2006 08:20	06/17/2006 09:20
20606171315	SK-SW52-1018 (DISS)	Water	06/16/2006 08:35	06/17/2006 09:20
20606171316	SK-SWEB-1018 (DISS)	Water	06/16/2006 09:15	06/17/2006 09:20

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW50-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: (soil/water) Water  
Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606171301  
Level: (low/med) Lab File ID: 2060621/V3561  
% Moisture: not dec. Date Collected: 06/15/06 Time: 1450  
GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/17/06  
Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1135  
Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: JCK  
Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 326150  
CONCENTRATION UNITS: ug/L Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-67-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-43-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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FORM 1 VOA

5/1/06  
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW50-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606171301  
 Level: (low/med) Lab File ID: 2060621/V3561  
 % Moisture: not dec. Date Collected: 06/15/06 Time: 1450  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/17/06  
 Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1135  
 Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: JCK  
 Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 326150  
 CONCENTRATION UNITS: ug/L Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-SW50-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: Water Lab Sample ID: 20606171301  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060621/V3561  
Level: (low/med) \_\_\_\_\_ Date Collected: 06/15/06 Time: 1450  
% Moisture: not dec. \_\_\_\_\_ Date Received: 06/17/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/21/06 Time: 1135  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: JCK  
Soil Extract Volume: \_\_\_\_\_ (  $\mu$ L )  
Soil Aliquot Volume: \_\_\_\_\_ (  $\mu$ L )

Number TICs Found: 0

CONCENTRATION UNITS:  $\mu$ g/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW51-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606171305

Level: (low/med)

Lab File ID: 2060621/V3562

% Moisture: not dec.

Date Collected: 06/16/06

Time: 0810

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/17/06

Instrument ID: MSV0

Date Analyzed: 06/21/06

Time: 1158

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	0.47	J	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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FORM 1 VOA

7/1/06  
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW51-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606171305  
 Level: (low/med) Lab File ID: 2060621/V3562  
 % Moisture: not dec. Date Collected: 06/16/06 Time: 0810  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/17/06  
 Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1158  
 Soil Extract Volume: ( µL ) Dilution Factor: 1 Analyst: JCK  
 Soil Aliquot Volume: ( µL ) Prep Batch: Analytical Batch: 326150  
 Analytical Method: OLCO 2.1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-SW51-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: Water Lab Sample ID: 20606171305  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060621/V3562  
Level: (low/med) \_\_\_\_\_ Date Collected: 06/16/06 Time: 0810  
% Moisture: not dec. \_\_\_\_\_ Date Received: 06/17/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/21/06 Time: 1158  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: JCK  
Soil Extract Volume: \_\_\_\_\_ (  $\mu$ L )  
Soil Aliquot Volume: \_\_\_\_\_ (  $\mu$ L )

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW51DUPE-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606171306

Level: (low/med)

Lab File ID: 2060621/V3563

% Moisture: not dec.

Date Collected: 06/16/06

Time: 0820

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/17/06

Instrument ID: MSV0

Date Analyzed: 06/21/06

Time: 1222

Soi Extract Volume: (µL)

Dilution Factor: 1

Analyst: JCK

Soi Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
73-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
73-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
73-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
73-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW51DUPE-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606171306

Level: (low/med)

Lab File ID: 2060621/V3563

% Moisture: not dec.

Date Collected: 06/16/06 Time: 0820

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/17/06

Instrument ID: MSV0

Date Analyzed: 06/21/06 Time: 1222

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: JCK

Soi: Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-SW51DUPE-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: Water Lab Sample ID: 20606171306  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060621/V3563  
Level: (low/med) \_\_\_\_\_ Date Collected: 06/16/06 Time: 0820  
% Moisture: not dec. \_\_\_\_\_ Date Received: 06/17/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/21/06 Time: 1222  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: JCK  
Soil Extract Volume: \_\_\_\_\_ ( µL )  
Soil Aliquot Volume: \_\_\_\_\_ ( µL )

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW52-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606171307

Level: (low/med)

Lab File ID: 2060621/V3571

% Moisture: not dec.

Date Collected: 06/16/06

Time: 0835

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/17/06

Instrument ID: MSV0

Date Analyzed: 06/21/06

Time: 1552

Soi Extract Volume: (µL)

Dilution Factor: 1

Analyst: JCK

Soi Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
73-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
73-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SW52-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606171307  
 Level: (low/med) Lab File ID: 2060621/V3571  
 % Moisture: not dec. Date Collected: 06/16/06 Time: 0835  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/17/06  
 Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1552  
 Soi Extract Volume: ( µL ) Dilution Factor: 1 Analyst: JCK  
 Soil Aliquot Volume: ( µL ) Prep Batch: Analytical Batch: 326150  
 Analytical Method: OLCO 2.1  
 CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-SW52-1018

Lab Name: GCAL Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: Water

Lab Sample ID: 20606171307

Sample wt/vol:

Units:

Lab File ID: 2060621/V3571

Level: (low/med)

Date Collected: 06/16/06

Time: 0835

% Moisture: not dec.

Date Received: 06/17/06

GC Column: DB-624-30M

ID: .53 (mm)

Date Analyzed: 06/21/06

Time: 1552

Instrument ID: MSV0

Dilution Factor: 1

Analyst: JCK

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SWEB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061713

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606171308

Level: (low/med)

Lab File ID: 2060621/V3572

% Moisture: not dec.

Date Collected: 06/16/06

Time: 0915

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/17/06

Instrument ID: MSV0

Date Analyzed: 06/21/06

Time: 1632

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	2.9	J	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	0.32	J	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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FORM 1 VOA

9/1/06

000041

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-SWEB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606171308  
 Level: (low/med) Lab File ID: 2060621/V3572  
 % Moisture: not dec. Date Collected: 06/16/06 Time: 0915  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/17/06  
 Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1632  
 Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: JCK  
 Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-SWEB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: Water Lab Sample ID: 20606171308  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060621/V3572  
Level: (low/med) \_\_\_\_\_ Date Collected: 06/16/06 Time: 0915  
% Moisture: not dec. \_\_\_\_\_ Date Received: 06/17/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/21/06 Time: 1632  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: JCK  
Soil Extract Volume: \_\_\_\_\_ (µL)  
Soil Aliquot Volume: \_\_\_\_\_ (µL)

Number TICs Found: 3

CONCENTRATION UNITS: ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	1823-52-5	2-Oxetanone, 4,4-dimethyl-	1.417	.274	
2.	53101-38-5	Unknown	1.775	.209	
3.	25419-06-1	Unknown	2.18	.228	



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW50-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2063  
 Matrix: Water Lab Sample ID: 20606171301  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/15/06 Time: 1450  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1514  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/LPrep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SW50-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
SAS No.: _____ SDG No.: <u>206061713</u>	Lab File ID: <u>2060621/B2063</u>
Matrix: <u>Water</u>	Lab Sample ID: <u>20606171301</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Date Collected: <u>06/15/06</u> Time: <u>1450</u>
Level: (low/med) <u>LOW</u>	Date Received: <u>06/17/06</u>
% Moisture: _____ decanted: (Y/N) _____	Date Extracted: <u>06/19/06</u>
GC Column: <u>DB-5MS-30M</u> ID: <u>.25</u> (mm)	Date Analyzed: <u>06/21/06</u> Time: <u>1514</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>JAR3</u>
Injection Volume: <u>1.0</u> (µL)	Prep Method: <u>OLM4.2 SVOA</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
CONCENTRATION UNITS: <u>ug/L</u>	Instrument ID: <u>MSSV3</u>
	Prep Batch: <u>326007</u> Analytical Batch: <u>326170</u>

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	<del>10.0</del> 0.035	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
95-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
29-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

FORM 1 SV-1

8/31/06  
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000132

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW50-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2063  
 Matrix: Water Lab Sample ID: 20606171301  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/15/06 Time: 1450  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1514  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CCNCENTRATION UNITS: ug/L Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL Sample ID: SK-SW50-1018  
 Lab Code: LA024 Case No: Contract:  
 SAS No.: SDG No: 206061713 Lab File ID: 2060621/B2063  
 Matrix: Water Lab Sample ID: 20606171301  
 Sample wt/vol: Units: Date Collected: 06/15/06 Time: 1450  
 Level: (low/med) Date Received: 06/17/06  
 % Moisture: not dec Date Extracted: 6/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1514  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SUSA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: SW-846-8270G OLM4.2  
 Instrument ID: MSSV3

Number TICs Found: 7

CONCENTRATION UNITS: µg/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.335	11	
2.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	19.4	
3.	18495-30-2	Propane, 1,1,2,3-tetrachloro-	1.139	4.26	
4.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.009	7.76	
5.	74381-40-1	Propanoic acid, 2-methyl-, 1-(	3.764	.578	
6.	57-10-3	Hexadecanoic acid	4.763	.566	
7.	4602-84-0	2,6,10-Dodecatrien-1-ol, 3,7,1	6.912	.602	

8/21/06  
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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2067  
 Matrix: Water Lab Sample ID: 20606171305  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0810  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1616  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2

Instrument ID: MSSV3CONCENTRATION UNITS: ug/LPrep Batch: 326007 Analytical Batch: 326170**CAS NO. COMPOUND****RESULT Q MDL RL**

95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-38-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2067  
 Matrix: Water Lab Sample ID: 20606171305  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0810  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1616  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2

CONCENTRATION UNITS: ug/L

Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

FORM I SV-1

000149



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SW51-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
SAS No.: _____ SDG No.: <u>206061713</u>	Lab File ID: <u>2060621/B2067</u>
Matrix: <u>Water</u>	Lab Sample ID: <u>20606171305</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Date Collected: <u>06/16/06</u> Time: <u>0810</u>
Level: (low/med) <u>LOW</u>	Date Received: <u>06/17/06</u>
% Moisture: _____ decanted: (Y/N) _____	Date Extracted: <u>06/19/06</u>
GC Column: <u>DB-5MS-30M</u> ID: <u>.25</u> (mm)	Date Analyzed: <u>06/21/06</u> Time: <u>1616</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>JAR3</u>
Injection Volume: <u>1.0</u> (µL)	Prep Method: <u>OLM4.2 SVOA</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>

CONCENTRATION UNITS: ug/L

Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Sample ID: SK-SW51-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061713

Lab File ID: 2060621/B2067

Matrix: Water

Lab Sample ID: 20606171305

Sample wt/vol: Units:

Date Collected: 06/16/06

Time: 0810

Level: (low/med)

Date Received: 06/17/06

% Moisture: not dec.

Date Extracted: 6/19/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06

Time: 1616

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM 4.2 SUSA

GPC Cleanup: (Y/N) N pH:

Analytical Method: ~~SW-846-8270C~~ OLM 04.2

Instrument ID: MSSV3

Number TICs Found: 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
110-82-7	Cyclohexane	.333	9.3	

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GCAL, Inc.

BNA QUANT AND RATIO REPORT

Data file : /var/chem/MSSV3.i/2060621.s.b/b2067.d  
Lab Smp Id: 20606171305 Client Smp ID: SK-SW51-1018  
Inj Date : 21-JUN-2006 16:16  
Operator : jar3 Inst ID: MSSV3.i  
Smp Info : 20606171305\*4342\*  
Misc Info : 20606171305\*MSSV~3788~\*061713\*1000-1\*326007\*  
Comment :  
Method : /var/chem/MSSV3.i/2060621.s.b/CLP4.2\_02.m.m  
Meth Date : 26-Jun-2006 09:30 rfs Quant Type: ISTD  
Cal Date : 21-JUN-2006 12:18 Cal File: b2055.d  
Als bottle: 13  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: org.gcal.com

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ppm)	FINAL ( ug/L)
\$ 1 2-Fluorophenol	112	0.730	0.727	(0.462)	230782	81.9764	41.0
* 3 Phenol d5	99	1.343	1.337	(0.851)	1188014	89.7791	44.9
1 6 2-Chlorophenol d4	152	1.420	1.417	(0.899)	475623	84.4658	42.2 (A)
* 8 1 4-Dichlorobenzene-d4	115	1.578	1.578	(1.000)	140645	40.0000	
\$ 9 1 2-Dichlorobenzene-d4	152	1.683	1.683	(1.067)	172463	50.9002	25.4 (A)
* 16 Nitrobenzene d5	82	1.959	1.956	(0.815)	876405	57.2966	28.6
* 23 Naphthalene d8	136	2.404	2.404	(1.000)	637834	40.0000	
\$ 33 2-Fluorobiphenyl	172	3.080	3.077	(0.886)	594755	49.9730	25.0
* 41 Acenaphthene d10	164	3.474	3.474	(1.000)	356008	40.0000	
\$ 53 2,4,6-Tribromophenol	332	3.954	3.957	(1.138)	101640	85.6877	42.8
* 58 Benanthrene d10	168	4.371	4.374	(1.000)	487547	40.0000	
\$ 65 Terphenyl d14	244	5.373	5.373	(0.881)	440823	58.1400	29.1
* 69 Chrysene-d12	240	6.100	6.103	(1.000)	332143	40.0000	

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51DUPE-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2068  
 Matrix: Water Lab Sample ID: 20606171306  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0820  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1631  
 Concentrated Extract Volume: 1000 (μL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (μL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CONCENTRATION UNITS: ug/L Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-6	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
91-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51DUPE-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061713 Lab File ID: 2060621/B2068  
 Matrix: Water Lab Sample ID: 20606171306  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0820  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1631  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2

CONCENTRATION UNITS: µg/L

Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0000	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-57-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-C1-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51DUPE-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2068  
 Matrix: Water Lab Sample ID: 20606171306  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0820  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1631  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CONCENTRATION UNITS: ug/L Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SK-SW51DUPE-1018
Lab Code: LA024	Case No.:
SAS No.:	SDG No.: 206061713
Matrix: Water	Lab File ID: 2060621/B2068
Sample wt/vol:	Units:
Level: (low/med)	Date Collected: 06/16/06
% Moisture: not dec.	Time: 0820
GC Column: DB 5MS-30M	Date Received: 06/17/06
Concentrated Extract Volume: 1000	Date Analyzed: 06/21/06
Injection Volume: 1.0	Time: 1631
GPC Cleanup: (Y/N) N	Dilution Factor: 1
pH:	Analyst: JAR3
	Prep Method: OLM 4.2 SW 8.46-0270C
	Analytical Method: SW 8.46-0270C OLM 04.2
	Instrument ID: MSSV3

Number TICs Found : 10

CONCENTRATION UNITS:ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	10.3	
2.	4276-09-9	1-Butanol, 2-amino-3-methyl-,	6.821	1.33	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	19.2	
4.	558-37-2	1-Butene, 3,3-dimethyl-	.514	.612	
5.	115-18-4	3-Buten-2-ol, 2-methyl-	1.079	1.89	
6.	96-19-5	1-Propene, 1,2,3-trichloro-	1.136	4.41	
7.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.012	9.71	
8.	20524-86-1	Methane, oxybis[dichloro-	3.341	.62	
9.	74381-40-1	Propanoic acid, 2-methyl-, 1-(	3.764	.995	
10.	57-11-4	Octadecanoic acid	5.248	1.47	

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW52-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2069  
 Matrix: Water Lab Sample ID: 20606171307  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0835  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: 25 (mm) Date Analyzed: 06/21/06 Time: 1646  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-51-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW52-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2069  
 Matrix: Water Lab Sample ID: 20606171307  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0835  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1646  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	<del>10.30642</del>	<del>JB</del>	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-73-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW52-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2069  
 Matrix: Water Lab Sample ID: 20606171307  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0835  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1646  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Sample ID: SK-SW52-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061713

Lab File ID: 2060621/B2069

Matrix: Water

Lab Sample ID: 20606171307

Sample wt/vol:

Units:

Date Collected: 06/16/06

Time: 0835

Level: (low/med)

Date Received: 06/17/06

% Moisture: not dec.

Date Extracted: 6/19/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1646

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume: 1.0

(µL)

Prep Method: CLM4.2 S00P

GPC Cleanup: (Y/N) N

pH:

Analytical Method: ~~SW-846 8270C~~ CLM04.2

Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 110-82-7	Cyclohexane	.332	10.5	
2. 74381-40-1	Propanoic acid, 2-methyl- 1-(	3.764	1.73	
3. 994-05-8	Butane, 2-methoxy-2-methyl-	.347	19.3	
4. 625-33-2	3-Penten-2-one	.514	.586	
5. 691-38-3	2-Pentene, 4-methyl-, (Z)-	.582	.676	
6. 115-18-4	3-Buten-2-ol, 2-methyl-	1.082	1.83	
7. 21400-25-9	1-Propene, 1,1,2-trichloro-	1.136	4.87	
8. 65-85-0	Benzoic Acid	2.257	.401	
9. 334-48-5	Decanoic acid	2.668	.446	
10. 109-21-7	Butanoic acid, butyl ester	3.128	.407	

8/31/06  
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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SWEB-1018  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061713 Lab File ID: 2060621/B2070  
 Matrix: Water Lab Sample ID: 20606171308  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/16/06 Time: 0915  
 Level: (low/med) LOW Date Received: 06/17/06  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 06/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1701  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-53-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SWEB-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
SAS No.: _____ SDG No.: <u>206061713</u>	Lab File ID: <u>2060621/B2070</u>
Matrix: <u>Water</u>	Lab Sample ID: <u>20606171308</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Date Collected: <u>06/16/06</u> Time: <u>0915</u>
Level: (low/med) <u>LOW</u>	Date Received: <u>06/17/06</u>
% Moisture: _____ decanted: (Y/N) _____	Date Extracted: <u>06/19/06</u>
GC Column: <u>DB-5MS-30M</u> ID: <u>.25</u> (mm)	Date Analyzed: <u>06/21/06</u> Time: <u>1701</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>JAR3</u>
Injection Volume: <u>1.0</u> (µL)	Prep Method: <u>OLM4.2 SVOA</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
	Instrument ID: <u>MSSV3</u>

CONCENTRATION UNITS: ug/L

Prep Batch: 326007 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	<del>10.0</del> 1.86	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-66-5	Pentachlorophenol	25.0	U	0.010	25.0
85-11-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

8/31/06  
mca

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SWEB-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
SAS No.: _____ SDG No.: <u>206061713</u>	Lab File ID: <u>2060621/B2070</u>
Matrix: <u>Water</u>	Lab Sample ID: <u>20606171308</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Date Collected: <u>06/16/06</u> Time: <u>0915</u>
Level: (low/med) <u>LOW</u>	Date Received: <u>06/17/06</u>
% Moisture: _____ decanted: (Y/N) _____	Date Extracted: <u>06/19/06</u>
GC Column: <u>DB-5MS-30M</u> ID: <u>.25</u> (mm)	Date Analyzed: <u>06/21/06</u> Time: <u>1701</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>JAR3</u>
Injection Volume: <u>1.0</u> (µL)	Prep Method: <u>OLM4.2 SVOA</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
CONCENTRATION UNITS: <u>ug/L</u>	Instrument ID: <u>MSSV3</u>
	Prep Batch: <u>326007</u> Analytical Batch: <u>326170</u>

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL Sample ID: SK-SWEB-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061713 Lab File ID: 2060621/B2070  
 Matrix: Water Lab Sample ID: 20606171308  
 Sample wt/vol: Units: Date Collected: 06/16/06 Time: 0915  
 Level: (low/med) Date Received: 06/17/06  
 % Moisture: not dec Date Extracted: 6/19/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1701  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM 4.2 SODA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: SW-846 8270C OLM 4.2  
 Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	10.9	
2.	112-95-8	Eicosane	7.621	3.89	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.344	21.2	
4.	115-18-4	3-Buten-2-ol, 2-methyl-	1.082	1.36	
5.	21400-25-9	1-Propene, 1,1,2-trichloro-	1.136	3.74	
6.	398-23-2	1,1'-Biphenyl, 4,4'-difluoro-	3.06	.965	
7.	96-76-4	Phenol, 2,4-bis(1,1-dimethylet	3.511	1.15	
8.	136-60-7	Benzoic acid, butyl ester	3.699	.944	
9.	74381-40-1	Propanoic acid, 2-methyl-, 1-(	3.764	2.14	
10.	0-00-0	10-Methylnonadecane	7.125	3.18	

8/31/06  
msm



1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SW50-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
Matrix: <u>Water</u>	SAS No.: _____ SDG No.: <u>206061713</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Lab Sample ID: <u>20606171301</u>
Level: (low/med) <u>LOW</u>	Date Collected: <u>06/15/06</u> Time: <u>1450</u>
% Moisture: _____ decanted: (Y/N) _____	Date Received: <u>06/17/06</u>
GC Column: _____ ID: _____ (mm)	Date Extracted: <u>06/19/06</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Date Analyzed: <u>06/21/06</u> Time: <u>1426</u>
Soil Aliquot Volume: _____ (µL)	Dilution Factor: <u>1</u> Analyst: <u>DLB</u>
Injection Volume: <u>1</u> (µL)	Prep Method: <u>OLM4.2 PEST/PCB</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
Prep Batch: <u>326006</u> Analytical Batch: <u>326218</u>	Sulfur Cleanup: (Y/N) <u>N</u> Instrument ID: <u>GCS18A</u>

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A020

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-23-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-SW51-1018  
 Lab Code: LA024 Case No.: Contract:  
 Matrix: Water SAS No.: SDG No.: 206061713  
 Sample wt/vol: 1000 Units: mL Lab Sample ID: 20606171305  
 Level: (low/med) LOW Date Collected: 06/16/06 Time: 0810  
 % Moisture: decanted: (Y/N) Date Received: 06/17/06  
 GC Column: ID: (mm) Date Extracted: 06/19/06  
 Concentrated Extract Volume: 1000 (µL) Date Analyzed: 06/21/06 Time: 1523  
 Soil Aliquot Volume: (µL) Dilution Factor: 1 Analyst: DLB  
 Injection Volume: 1 (µL) Prep Method: OLM4.2 PEST/PCB  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Prep Batch: 326006 Analytical Batch: 326218 Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A  
 CONCENTRATION UNITS: ug/L Lab File ID: 2060621/SV18A023

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SK-SW51DUPE-1018
Lab Code: LA024      Case No.:	Contract:
Matrix: Water	SAS No.:      SDG No.: 206061713
Sample wt/vol: 1000      Units: mL	Lab Sample ID: 20606171306
Level: (low/med) LOW	Date Collected: 06/16/06      Time: 0820
% Moisture:      decanted: (Y/N)	Date Received: 06/17/06
GC Column:      ID:      (mm)	Date Extracted: 06/19/06
Concentrated Extract Volume: 1000      (µL)	Date Analyzed: 06/21/06      Time: 1602
Soil Aliquot Volume:      (µL)	Dilution Factor: 1      Analyst: DLB
Injection Volume: 1      (µL)	Prep Method: OLM4.2 PEST/PCB
GPC Cleanup: (Y/N) N      pH:	Analytical Method: OLMO 4.2
Prep Batch: 326006      Analytical Batch: 326218	Sulfur Cleanup: (Y/N) N      Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A024

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: <b>GCAL</b>	Sample ID: <b>SK-SW52-1018</b>
Lab Code: <b>LA024</b> Case No.: _____	Contract: _____
Matrix: <b>Water</b>	SAS No.: _____      SDG No.: <b>206061713</b>
Sample wt/vol: <b>1000</b> Units: <b>mL</b>	Lab Sample ID: <b>20606171307</b>
Level: (low/med) <b>LOW</b>	Date Collected: <b>06/16/06</b> Time: <b>0835</b>
% Moisture: _____      decanted: (Y/N)	Date Received: <b>06/17/06</b>
GC Column: _____      ID: _____      (mm)	Date Extracted: <b>06/19/06</b>
Concentrated Extract Volume: <b>1000</b> (µL)	Date Analyzed: <b>06/21/06</b> Time: <b>1639</b>
Soil Aliquot Volume: _____      (µL)	Dilution Factor: <b>1</b> Analyst: <b>DLB</b>
Injection Volume: <b>1</b> (µL)	Prep Method: <b>OLM4.2 PEST/PCB</b>
GPC Cleanup: (Y/N) <b>N</b> pH: _____	Analytical Method: <b>OLMO 4.2</b>
Prep Batch: <b>326006</b> Analytical Batch: <b>326218</b>	Sulfur Cleanup: (Y/N) <b>N</b> Instrument ID: <b>GCS18A</b>

CONCENTRATION UNITS: **ug/L**

Lab File ID: **2060621/SV18A025**

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-SWEB-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
Matrix: <u>Water</u>	SAS No.: _____      SDG No.: <u>206061713</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Lab Sample ID: <u>20606171308</u>
Level: (low/med) <u>LOW</u>	Date Collected: <u>06/16/06</u> Time: <u>0915</u>
% Moisture: _____      decanted: (Y/N) _____	Date Received: <u>06/17/06</u>
GC Column: _____      ID: _____      (mm)	Date Extracted: <u>06/19/06</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Date Analyzed: <u>06/21/06</u> Time: <u>1658</u>
Sol. Aliquot Volume: _____      (µL)	Dilution Factor: <u>1</u> Analyst: <u>DLB</u>
Injection Volume: <u>1</u> (µL)	Prep Method: <u>OLM4.2 PEST/PCB</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
Prep Batch: <u>326006</u> Analytical Batch: <u>326218</u>	Sulfur Cleanup: (Y/N) <u>N</u> Instrument ID: <u>GCS18A</u>

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A026

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW50-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: ( soil / water ) Water Lab Sample ID: 20606171301  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.7	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	43.6	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	72200			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	19.3	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	22100			P
7439-96-5	Manganese	3.3	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2880	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	46300			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	1.3	B		P
57-12-5	Cyanide	0.6	U		AS

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Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

U.S. EPA - CLP  
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW51-1018

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061713

Matrix: ( soil / water ) Water

Lab Sample ID: 20606171305

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/17/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No..	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	36.2	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.2	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	82800			P
7440-47-3	Chromium	2.0	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	55.9	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23600			P
7439-96-5	Manganese	7.7	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2810	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	46400			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P
57-12-5	Cyanide	0.6	U		AS

Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW51DUPE-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: ( soil / water ) Water Lab Sample ID: 20606171306  
 Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
 % Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	53.7	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.5	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	82200			P
7440-47-3	Chromium	1.9	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	78.3	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23500			P
7439-96-5	Manganese	10.5	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2810	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	46500			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P
57-12-5	Cyanide	0.6	U		AS

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Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
 Comments: \_\_\_\_\_



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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW52-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
 Matrix: ( soil / water ) Water Lab Sample ID: 20606171307  
 Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
 % Solids: \_\_\_\_\_  
 Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	33.6	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.6	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	83700			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	49.3	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23100			P
7439-96-5	Manganese	7.8	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2780	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	48200			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	6.2	B		P
57-12-5	Cyanide	0.6	U		AS

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Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
 Comments: \_\_\_\_\_

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SWEB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: ( soil / water ) Water Lab Sample ID: 20606171308  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	0.1	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	17.7	B		P
7440-47-3	Chromium	0.4	U		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	31.7	B		P
7439-96-5	Manganese	0.3	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	69.6	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	49.1	U		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P
57-12-5	Cyanide	0.6	U		AS

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Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW50-1018 (DISS)

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061713

Matrix: ( soil / water ) Water

Lab Sample ID: 20606171310

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/17/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	43.6	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	72300			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	14.4	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	22100			P
7439-96-5	Manganese	1.9	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2860	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	45900			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	1.3	B		P

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Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW51-1018 (DISS)

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061713

Matrix: ( soil / water ) Water

Lab Sample ID: 20606171313

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/17/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.3	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	83100			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23500			P
7439-96-5	Manganese	6.0	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.6	B		P
7440-09-7	Potassium	2770	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	45200			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	1.9	B		P

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Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW51DUPE-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: ( soil / water ) Water Lab Sample ID: 20606171314  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.3	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	82600			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23500			P
7439-96-5	Manganese	5.1	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2740	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	46000			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	4.5	B		P

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Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SW52-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: ( soil / water ) Water Lab Sample ID: 20606171315  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.7	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	48.0	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	83100			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23200			P
7439-96-5	Manganese	4.9	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	2690	B	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	46100			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P

T  
UJ

8/31/06  
mte

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-SWEB-1018 (DISS)

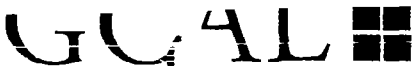
Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061713  
Matrix: ( soil / water ) Water Lab Sample ID: 20606171316  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/17/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.3	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	0.1	U		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	53.2	B		P
7440-47-3	Chromium	0.4	U		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	27.3	B		P
7439-96-5	Manganese	0.3	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.8	B		P
7440-09-7	Potassium	42.6	U	E	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	116	B		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.8	B		P
7440-66-6	Zinc	2.0	B		P

US  
US

8/31/06  
ms

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:



GULF COAST ANALYTICAL LABORATORIES, INC.  
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

# CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech  
Client Name

4342  
Client #

206061713  
Workorder #

6-30-06  
Due Date

## Report to:

Client: Earth Tech  
Address: 2373 Progress Drive  
Helena, MS 38106  
Contact: Pat Higgins  
Phone: 654 442-2500  
Fax: 654 442-2311

## Bill to:

Client:   
Address: Glenview  
Contact: Springs Contract  
Phone:   
Fax:

## Analytical Requests & Method

## Lab use only:

Custody Seal  
used ☒ yes ☐ no  
in tact ☐ yes ☐ no  
Temperature °C 5

P.O. Number 59280.01 Project Name/Number Shinner Landfill - 2nd Qtr. 2006

Sampled By: Pat Higgins & Dallas Grimes

Matrix <sup>1</sup>	Date	Time (2400)	COE	LAB	Sample Description	Preservatives	No Con-tainers	Volatiles	Semi Volatiles	PCP's	Pesticides	Total Metals	Dissolved Metals	Cyanide	Remarks:	Lab ID
	6/15	1450			Sh-SWSD-1018	HCL	3	X							Refer to	1
	6/15	1500			Sh-SWSD MS-1018										Table 7 (TAL)	2
	6/15	1510			Sh-SWSD MSP-1018										and Table 8	3
	6/16	0840			Sh-SWSD-1018										(TAL) of the	5
	6/16	0820			Sh-SWSD Dup-1018										Final D.M	6
	6/16	0835			Sh-SWSD-1018										Plan for a	7
	6/16	0815			Sh-SWSD-1018	Various	10		X	X	X	X	X	X	Complete list of analytes	8 16
															VHBLK	9

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

\* Standard Turn-around  
\* Sample sent via Fed Ex for Priority overnight Delivery

Matrix<sup>1</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11 98



# CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech

4347

206061713

6.30.06

Client Name

Client #

Workorder #

Due Date

## Report to:

Client: Earth Tech  
Address: 2373 Progress Drive  
Hebron, KY 41048  
Contact: Pat Higgins  
Phone: 855 442-2300  
Fax: 859 442-2311

## Bill to:

Client: \_\_\_\_\_  
Address: Green Springs  
Contact: Contract  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

## Analytical Requests & Method

## Lab use only:

Custody Seal

used ☒ yes ☐ no

in tact ☒ yes ☐ no

Temperature °C 5

P.O. Number 54280.01 Project Name/Number Shinner Landfill 2nd Qtr. 2006

Sampled By: Pat Higgins & Dallas Grimes

Lab ID

Remarks:

/D.S.

Refer to Table 7

1 10

(TCL) and

2 11

Table 8 (TAL)

of The Final

OIM Plan for

a complete list

of analytes

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other \_\_\_\_\_

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 769-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT





GULF COAST ANALYTICAL LABORATORIES, INC.  
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

# CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech  
Client Name

4342  
Client #

206061713  
Workorder #

6-30-06  
Due Date

## Report to:

Client: Earth Tech  
Address: 2373 Progress Drive  
Helena, MT 41090  
Contact: Pat Higgins  
Phone: 854-442-2300  
Fax: 854-442-2311

## Bill to:

Client:   
Address:   
Contact: Glenn Springs  
Phone: Contract  
Fax:

## Analytical Requests & Method

Volatiles  
Semi Volatiles  
Pesticides  
Pesticides  
Total Metals  
Metals - Dissolved  
Cyanide

## Lab use only:

Custody Seal  
used ☒ yes ☐ no  
in tact ☒ yes ☐ no  
Temperature °C 8

P.O. Number 54280.01  
Project Name/Number Skinner Lundtill - 2nd Qtr. 2006

Sampled By: Pat Higgins, Dallas Grimes

Matrix	Date	Time (2400)	Temp	Sample Description	Preservatives	No Containers	Volatiles	Semi Volatiles	Pesticides	Pesticides	Total Metals	Metals - Dissolved	Cyanide	Remarks	Lab ID
6/16	SW	1510	X	Sk - SW 50 MSD - 1018	Various	7	X	X	X	X	X	X	X	Refer to	3, 4, 12
6/16	SW	0935	X	Sk - SW 52 - 1018	Various	7	X	X	X	X	X	X	X	Table 7 (TCL)	7, 15
														and Table 8	
														(TAL) of the	
														Final OSM	
														Plan for a	
														complete list	
														of analytes	

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Received by: (Signature)

Received by: (Signature)

Received by: (Signature)

Date:

Date:

Date:

Time:

Time:

Time:

Note:

\* Standard Delivery  
\* Samples sent via FedEx - Priority overnight delivery  
By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061713**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 29, 2006**  
**Data Validator: Mark Kromis**

## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061713**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 29, 2006**  
**Data Validator: Mark Kromis**

## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. The results were reported by GCAL under Sample Delivery Group (SDG) 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171304	SK-SW50DUP-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018
20606171310	SK-SW50-1018 (DISS)
20606171311	SK-SW50MS-1018 (DISS)
20606171312	SK-SW50DUP-1018 (DISS)
20606171313	SK-SW51-1018 (DISS)
20606171314	SK-SW51DUPE-1018 (DISS)
20606171315	SK-SW-52-1018 (DISS)
20606171316	SK-SWEB-1018 (DISS)

## INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:



- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1.     Holding Times
2.     Calibration
  - A. Initial Calibration (IC)
  - B. Continuing Calibration (CC)
3.     Blanks
4.     Inductively Coupled Plasma (ICP) Interference Check Sample
5.     Laboratory Control Sample (LCS)
6.     Duplicate Analysis
7.     Spike Sample Analysis
8.     ICP Serial Dilution
9.     System Performance
10.    Documentation
11.    Overall Assessment

## **1. HOLDING TIMES**

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. CALIBRATION**

### **A. Initial Calibration**

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

### **B. Continuing Calibration**

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

## **3. BLANKS**

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

## **4. ICP INTERFERENCE CHECK SAMPLE**

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

## **5. LABORATORY CONTROL SAMPLES**

Recoveries were within the control limit (80-120%) for all constituents.

## **6. DUPLICATE ANALYSIS**

The laboratory used samples SK-SW50-1018 (total and dissolved fractions) for the duplicate samples. The Relative Percent Difference (RPD) between the sample and duplicate results for the total and dissolved fractions were within the acceptance criteria (<20%) for all target analytes.

## **7. SPIKE SAMPLE ANALYSIS**

The laboratory used sample SK-SW50-1018 (total and dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) with the exception Selenium (60%) in the dissolved fraction.

As per the National Functional Guidelines, if the percent recovery is greater than 30% but less than 75% qualify results greater than the IDL with "J" and non-detected results with "UJ".

## **8. ICP SERIAL DILUTION**

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The serial dilution percent differences were within the acceptance criteria for all target analytes with the exception of Potassium associated with the total fraction. As per the National Functional Guidelines, if the serial dilution %D exceeds the acceptance criteria then qualify results associated with that analyte as estimated with a "J".

## **9. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **10. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

## **11. OVERALL ASSESSMENT**

The percent recoveries for Silver in the Contract Required Detection Limit (CRDL) standards analyzed on 6/23/06 were 79, 81%, 82%, 82%, and 81%. As per the National Functional Guidelines, if the CRDL is below 80% then detected results are qualified as estimated with "J" and non-detected results with "UJ". The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various data qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

## **1. HOLDING TIMES**

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## **2. GC/MS TUNING**

The samples were analyzed on a single GC/MS system, identified as MSSV3. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/21/06 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF for the IC's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

One CC dated 6/21/06 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC's were within the acceptance criteria for the CC dated 6/21/06.

## **4. BLANKS**

One laboratory semivolatile method blank and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### Method Blank (MB382003)

Bis-(2-ethylhexyl) phthalate (0.707 ppb) was detected in the blank extracted on 6/19/06.

### Equipment Blank (SK-SWEB -1018)

Bis-(2-ethylhexyl) phthalate (1.86 ppb) was detected in the Equipment Blank collected on 6/16/06. The Bis-(2-ethylhexyl) phthalate detected in the Equipment Blank was mitigated by the presence of Bis-(2-ethylhexyl) phthalate in the associated Method Blank.

## **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported semivolatile system monitoring compounds (SMC) were recovered within acceptable control limits.

## **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

Sample SK-SW50-1018 was submitted for MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol. As per the National Functional Guidelines no action is taken on MS/MSD data alone.

## **7. INTERNAL STANDARDS PERFORMANCE**

Internal standard (IS) areas and Retention Times (RT) were within the acceptance limits for the reported semivolatile samples.

## **8. COMPOUND IDENTIFICATION**

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

## **9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

## **10. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

## **11. DOCUMENTATION**

There was no extraction date or preparation method listed on Form I SV-TIC. The analytical method reported by the GCAL on the Form I SV-TIC was listed as SW-846 8270C when it should have been listed as OLM04.2. The data validator manually made the corrections.

## **12. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061713 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.



- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1.     Holding Times
2.     GC/MS Tuning
3.     Calibration
  - A. IC
  - B. CC
4.     Blanks
5.     System Monitoring Compound Recovery
6.     MS/MSD
7.     Laboratory Control Sample
8.     Internal Standards Performance
9.     Compound Identification
10.    Constituent Quantitation and Reported Detection Limits
11.    System Performance
12.    Documentation
13.    Overall Assessment

## **1.     HOLDING TIMES**

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. GC/MS TUNING**

The samples were analyzed one GC/MS system, identified as MSV0. Two bromofluorobenzene (BFB) tunes were run on MSV0. The BFB tunes are acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/20/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards is present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds.

The RRF's and the average RRF for the IC were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone associated with the IC dated 6/20/06. The %RSD's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

One CC dated 6/21/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/21/06 were within the acceptance criteria for all target compounds with the exception of 1,2,4-Trichlorobenzene. The CC RRF's for the CC dated 6/21/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ". If the CC RF is less than the acceptance criteria then qualify detected results with "J" and non-detected results with "R".

## **4. BLANKS**

One laboratory volatile method blank, storage blank, and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### MB382601

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/21/06 (1012).

#### Storage Blank (VHBLK)

There were no compounds detected above the Reporting Limit (RL) in the Storage Blank analyzed on 6/21/06.

#### Equipment Blank (SK-SWEB-1018)

Acetone (2.9 ppb) was detected in the Equipment Blank collected on 6/16/06.

### **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported volatile system monitoring compounds (SMC) were recovered within acceptable control limits (80%-120%).

### **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-SW50-1018 was submitted for the MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria. The RPD between the compounds were within the acceptance criteria.

### **7. LABORATORY CONTROL SAMPLE**

One Laboratory Control Sample was analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

### **8. INTERNAL STANDARDS PERFORMANCE**

Internal Standard (IS) areas and retention times were within acceptable limits for the reported volatile sample analyses.

### **9. COMPOUND IDENTIFICATION**

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

### **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for VOCs.

### **11. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

**12. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

**13. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 206061713 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061713.

GCAL #	Sample Description
20606171301	SK-SW50-1018
20606171302	SK-SW50MS-1018
20606171303	SK-SW50MSD-1018
20606171305	SK-SW51-1018
20606171306	SK-SW51DUPE-1018
20606171307	SK-SW-52-1018
20606171308	SK-SWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

## **1. HOLDING TIMES**

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were initially extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## **2. GC/ECD INSTRUMENT PERFORMANCE CHECK**

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits. The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM).

The percent breakdown for both 4,4'-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4'-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

## **3. INITIAL CALIBRATION**

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion for Individual standard mixtures A and B were within the acceptance criteria.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%. The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

## **4. CALIBRATION VERIFICATION**

Absolute retention times were within appropriate time retention windows. The percent difference for each of the pesticides and surrogates in the PEM's were within the acceptance criteria of  $\pm 25.0$  percent for the calibration verifications.

The percent difference for each of the pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures A and B was within the acceptance criteria of  $\pm 25.0$  percent.

## **5. BLANKS**

One laboratory method blanks and an Equipment blank were analyzed with this SDG. The results are summarized below.

### Method Blank 381997

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/19/06.

### Equipment Blank SK-SWEB-1018

No constituents were detected above the laboratory-reporting limit in the Equipment Blank collected on 6/16/06.

## **6. SURROGATE SPIKES**

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria (30% - 150%) for all samples except as follows:

SK-SWEB-1018                      TCX (26%)

As per the National Functional Guidelines, if recoveries are between 10 and 30 percent qualify results greater than the detection limit with "J" and non-detected results with "UJ".

## **7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-SW50-1018 was submitted for MS/MSD analysis. All of the percent recoveries associated with the MS/MSD were within the acceptance criteria with the exception of the following: Lindane associated with the MS/MSD, Aldrin and Heptachlor associated with the MSD. All of the RPD's between the MS/MSD were outside of the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

## **8. PESTICIDE CLEANUP CHECKS**

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

## **9. TARGET COMPOUND IDENTIFICATION**

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported.

## **11. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

## **12. OVERALL ASSESSMENT**

The results are acceptable as qualified by the data validator.



## REFERENCES

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061509**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 22, 2006**  
**Data Validator: Mark Kromis**

## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. The results were reported by GCAL under Sample Delivery Group (SDG) 206061509.

GCAL #	Sample Description
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150909	SK-GW62A-1018 (DISS)
20606150910	SK-GW06R-1018 (DISS)
20606150911	SK-GW07R-1018 (DISS)
20606150912	SK-GW59-1018 (DISS)
20606150913	SK-GW64-1018 (DISS)
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150920	SK-GW58DUP-1018
20606150922	SK-GWEB-1018
20606150923	SK-GW61-1018 (DISS)
20606150924	SK-GW63-1018 (DISS)
20606150925	SK-GW63DUPE-1018 (DISS)
20606150926	SK-GW58-1018 (DISS)
20606150927	SK-GW58MS-1018 (DISS)
20606150928	SK-GW58DUP-1018 (DISS)
20606150929	SK-GWEB-1018 (DISS)

## INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Calibration
  - A. Initial Calibration (IC)
  - B. Continuing Calibration (CC)
3. Blanks
4. Inductively Coupled Plasma (ICP) Interference Check Sample
5. Laboratory Control Sample (LCS)
6. Duplicate Analysis
7. Spike Sample Analysis

8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

## **1. HOLDING TIMES**

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. CALIBRATION**

### **A. Initial Calibration**

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

### **B. Continuing Calibration**

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

## **3. BLANKS**

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

## **4. ICP INTERFERENCE CHECK SAMPLE**

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

## **5. LABORATORY CONTROL SAMPLES**

Recoveries were within the control limit (80-120%) for all constituents.

## **6. DUPLICATE ANALYSIS**

The laboratory used samples SK-GW58-1018 (total and dissolved fractions) for the duplicate samples. The Relative Percent Difference (RPD) between the sample and duplicate results for the total and dissolved fractions were within the acceptance criteria (<20%) for all target analytes.

## **7. SPIKE SAMPLE ANALYSIS**

The laboratory used sample SK-GW58-1018 (total and dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) with the exception of Thallium (72%) in the total fraction and Selenium (70%) in the dissolved fraction.

As per the National Functional Guidelines, if the percent recovery is greater than 30% but less than 75% qualify results greater than the IDL with "J" and non-detected results with "UJ".

## **8. ICP SERIAL DILUTION**

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The serial dilution percent differences were within the acceptance criteria for all target analytes with the exception of Aluminum, Chromium, Potassium, and Zinc associated with the total fraction. As per the National Functional Guidelines, if the serial dilution %D exceeds the acceptance criteria then qualify results associated with that analyte as estimated with a "J".

## **9. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **10. DOCUMENTATION**

GCAL qualified the results from the dissolved fraction for Aluminum, Chromium, Potassium, and Zinc with an "E" for being outside of the acceptance criteria for the serial dilution analysis. The percent difference between the sample results and serial dilution results associated with the dissolved fractions were within the acceptance criteria and therefore the results should not have been qualified with an "E" qualifier. GCAL qualified the results from the dissolved fraction for Thallium with an "N" for being outside of the acceptance criteria for the MS recovery. The percent recovery for Thallium associated with the MS was within the acceptance criteria and therefore the results should not have been qualified with an "N" qualifier. The MS recovery for Selenium associated with the dissolved fraction was outside of the acceptance criteria and therefore the results associated with the dissolved fraction should have been qualified with an "N" qualifier. The data validator made the corrections manually.

## **11. OVERALL ASSESSMENT**

The percent recoveries for Silver in the Contract Required Detection Limit (CRDL) standards analyzed on 6/23/06 were 79, 81%, 82%, 82%, and 81%. As per the National Functional Guidelines, if the CRDL is below 80% then detected results are qualified as estimated with "J" and non-detected results with "UJ". The results are acceptable with the validator-added qualifiers.



**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
SEMIVOLATILE ORGANICS**

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various data qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## 2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV3. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

## 3. CALIBRATION

### A. Initial Calibration

One IC dated 6/21/06 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF for the IC's were within the acceptance criteria specified in the method for all target compounds.

### B. Continuing Calibration

Two CC's dated 6/21/06 and 6/22/06 were analyzed in support of the semivolatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC's were within the acceptance criteria for the CC dated 6/21/06. The %D for 4-Chloroaniline, 3-Nitroaniline, and 4-Nitroaniline associated with the CC dated 6/22/06 exceeded the acceptance criteria. The RRF for the CC's were within the acceptance criteria specified in the method for all target compounds. As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

## 4. BLANKS

One laboratory semivolatile method blank and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### Method Blank (MB381314)

Bis-(2-ethylhexyl) phthalate (0.953 ppb) was detected in the blank extracted on 6/16/06.

#### Equipment Blank (SK-GWEB -1018)

Bis-(2-ethylhexyl) phthalate (1.60 ppb) was detected in the Equipment Blank collected on 6/15/06. The Bis-(2-ethylhexyl) phthalate detected in the Equipment Blank was mitigated by the presence of Bis-(2-ethylhexyl) phthalate in the associated Method Blank.

### **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported semivolatile system monitoring compounds (SMC) were recovered within acceptable control limits.

### **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

Sample SK-GW58-1018 was submitted for MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol associated with the MS. As per the National Functional Guidelines no action is taken on MS/MSD data alone.

### **7. INTERNAL STANDARDS PERFORMANCE**

Internal standard (IS) areas and Retention Times (RT) were within the acceptance limits for the reported semivolatile samples.

### **8. COMPOUND IDENTIFICATION**

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

### **9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

### **10. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

### **11. DOCUMENTATION**

There was no extraction date or preparation method listed on Form I SV-TIC. The analytical method reported by the GCAL on the Form I SV-TIC was listed as SW-846 8270C when it should have been listed as OLM04.2. The data validator manually made the corrections.

### **12. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
VOLATILE ORGANIC**

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150907	SK-GWTB-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150921	SK-GWTB-1018
20606150922	SK-GWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

## **1. HOLDING TIMES**

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. GC/MS TUNING**

The samples were analyzed one GC/MS system, identified as MSV0. Two bromofluorobenzene (BFB) tunes were run on MSV0. The BFB tunes are acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/20/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards is present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds.

The RRF's and the average RRF for the IC were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone associated with the IC dated 6/20/06. The %RSD's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

Two CCs dated 6/20/06 and 6/21/06 were analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/20/06 were within the acceptance criteria for all target compounds. The CC RRF's for the CC dated 6/20/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/21/06 were within the acceptance criteria for all target compounds with the exception of 1,2,4-Trichlorobenzene. The CC RRF's for the CC dated 6/21/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

If the CC RF is less than the acceptance criteria then qualify detected results with "J" and non-detected results with "R".

#### 4. BLANKS

Two laboratory volatile method blanks, storage blank, Equipment Blank, and two Trip Blanks were analyzed with this SDG. The results are summarized below.

##### MB382289

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/20/06 (1402).

##### MB382601

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/21/06 (1012).

##### Storage Blank (VHBLK)

Methylene chloride (0.19 ppb) was detected in the Storage Blank analyzed on 6/21/06.

##### Equipment Blank (SK-GWEB-1018)

Acetone (4.2 ppb) was detected in the Equipment Blank collected on 6/15/06.

##### Trip Blank (SK-GWTB-1018)

Methylene chloride (0.16 ppb) was detected in the Trip Blank that were shipped on 6/14/06. The Methylene chloride detected in the Trip Blank was mitigated by the presence of Methylene chloride in the Storage Blank.

##### Trip Blank (SK-GWTB-1018)

There were no compounds detected above the Reporting Limit (RL) in the Trip Blank that were shipped on 6/15/06.

#### 5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds (SMC) were recovered within acceptable control limits (80%-120%).



**6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-GW58-1018 was submitted for the MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria. The RPD between the compounds were within the acceptance criteria.

**7. LABORATORY CONTROL SAMPLE**

One Laboratory Control Sample was analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

**8. INTERNAL STANDARDS PERFORMANCE**

Internal Standard (IS) areas and retention times were within acceptable limits for the reported volatile sample analyses.

**9. COMPOUND IDENTIFICATION**

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

**10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for VOCs.

**11. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

**12. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

**13. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 206061509  
PESTICIDES**

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018
20606150928	SK-GW58DUP-1018
20606150930	SK-GW63DUPE-1018 (RE)

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were initially extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time. The surrogates for sample SK-GW63DUPE-1018 were not detected therefore the sample was re-extracted. The sample was re-extracted outside the recommended holding times. As per the National Functional Guidelines, if the recommended holding is exceeded then qualify detected results for that sample with "J" and non-detected result with "UJ".

## 2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits. The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM).

The percent breakdown for both 4,4'-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4'-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

## 3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion for Individual standard mixtures A and B were within the acceptance criteria.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%. The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

## 4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows. The percent difference for each of the pesticides and surrogates in the PEM's were within the acceptance criteria of  $\pm 25.0$  percent for the calibration verifications with the exception of PEM03. As per the National Functional Guidelines, if the percent difference is greater than 25 percent for the compound(s) being quantified, qualify all detected results associated with that PEM with "J" and non-detects results with "UJ".

The percent difference for each of the pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures A and B was within the acceptance criteria of  $\pm 25.0$  percent.

## 5. BLANKS

Two laboratory method blanks and an Equipment blank were analyzed with this SDG. The results are summarized below.

### Method Blank 381333

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/16/06.

### Method Blank 383583

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/23/06.

### Equipment Blank SK-GWEB-1018

No constituents were detected above the laboratory-reporting limit in the Equipment Blank collected on 6/15/06.

## 6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria (30% - 150%) for all samples except as follows:

SK-GW07R-1018	DCB (29%)	
SK-GW59-1018	TCX (29%)	
SK-GW63DUPE-1018	TCX (0%)	DCB (0%)
SK-GW63DUPE-1018RE	TCX (0%)	DCB (0%)

As per the National Functional Guidelines, if recoveries are between 10 and 30 percent qualify results greater than the detection limit with "J" and non-detected results with "UJ". If the surrogate is not present and is not do to being diluted out qualify detected results with "J" and non-detected results with "R".

## 7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SK-GW58-1018 was submitted for MS/MSD analysis. All of the percent recoveries associated with the MS were outside of the acceptance criteria and Lindane was outside the acceptance in the MSD. All of the RPD's between the MS/MSD were outside of the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

## 8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

## **9. TARGET COMPOUND IDENTIFICATION**

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported.

## **11. DOCUMENTATION**

The date extracted was not reported on the pesticide method blank summary (Form IV Pest). GCAL did not qualify the results with a "P" that were confirmed by a second column and that had a percent difference of greater than 25% between the two results. The data validator manually made the corrections.

## **12. OVERALL ASSESSMENT**

The results are acceptable as qualified by the data validator.

## **REFERENCES**

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061509**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 22, 2006**  
**Data Validator: Mark Kromis**



## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
INORGANICS**

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. The results were reported by GCAL under Sample Delivery Group (SDG) 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150909	SK-GW62A-1018 (DISS)
20606150910	SK-GW06R-1018 (DISS)
20606150911	SK-GW07R-1018 (DISS)
20606150912	SK-GW59-1018 (DISS)
20606150913	SK-GW64-1018 (DISS)
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150920	SK-GW58DUP-1018
20606150922	SK-GWEB-1018
20606150923	SK-GW61-1018 (DISS)
20606150924	SK-GW63-1018 (DISS)
20606150925	SK-GW63DUPE-1018 (DISS)
20606150926	SK-GW58-1018 (DISS)
20606150927	SK-GW58MS-1018 (DISS)
20606150928	SK-GW58DUP-1018 (DISS)
20606150929	SK-GWEB-1018 (DISS)

**INTRODUCTION**

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1.     Holding Times
2.     Calibration
  - A. Initial Calibration (IC)
  - B. Continuing Calibration (CC)
3.     Blanks
4.     Inductively Coupled Plasma (ICP) Interference Check Sample
5.     Laboratory Control Sample (LCS)
6.     Duplicate Analysis
7.     Spike Sample Analysis

8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

## **1. HOLDING TIMES**

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. CALIBRATION**

### **A. Initial Calibration**

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

### **B. Continuing Calibration**

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

## **3. BLANKS**

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

## **4. ICP INTERFERENCE CHECK SAMPLE**

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

## **5. LABORATORY CONTROL SAMPLES**

Recoveries were within the control limit (80-120%) for all constituents.

## **6. DUPLICATE ANALYSIS**

The laboratory used samples SK-GW58-1018 (total and dissolved fractions) for the duplicate samples. The Relative Percent Difference (RPD) between the sample and duplicate results for the total and dissolved fractions were within the acceptance criteria (<20%) for all target analytes.

## **7. SPIKE SAMPLE ANALYSIS**

The laboratory used sample SK-GW58-1018 (total and dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) with the exception of Thallium (72%) in the total fraction and Selenium (70%) in the dissolved fraction.

As per the National Functional Guidelines, if the percent recovery is greater than 30% but less than 75% qualify results greater than the IDL with "J" and non-detected results with "UJ".

## **8. ICP SERIAL DILUTION**

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The serial dilution percent differences were within the acceptance criteria for all target analytes with the exception of Aluminum, Chromium, Potassium, and Zinc associated with the total fraction. As per the National Functional Guidelines, if the serial dilution %D exceeds the acceptance criteria then qualify results associated with that analyte as estimated with a "J".

## **9. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **10. DOCUMENTATION**

GCAL qualified the results from the dissolved fraction for Aluminum, Chromium, Potassium, and Zinc with an "E" for being outside of the acceptance criteria for the serial dilution analysis. The percent difference between the sample results and serial dilution results associated with the dissolved fractions were within the acceptance criteria and therefore the results should not have been qualified with an "E" qualifier. GCAL qualified the results from the dissolved fraction for Thallium with an "N" for being outside of the acceptance criteria for the MS recovery. The percent recovery for Thallium associated with the MS was within the acceptance criteria and therefore the results should not have been qualified with an "N" qualifier. The MS recovery for Selenium associated with the dissolved fraction was outside of the acceptance criteria and therefore the results associated with the dissolved fraction should have been qualified with an "N" qualifier. The data validator made the corrections manually.

## **11. OVERALL ASSESSMENT**

The percent recoveries for Silver in the Contract Required Detection Limit (CRDL) standards analyzed on 6/23/06 were 79, 81%, 82%, 82%, and 81%. As per the National Functional Guidelines, if the CRDL is below 80% then detected results are qualified as estimated with "J" and non-detected results with "UJ". The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. The results were reported by GCAL under SDG 206061509.

GCAL #	Sample Description
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018

### INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various data qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment



## **1. HOLDING TIMES**

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## **2. GC/MS TUNING**

The samples were analyzed on a single GC/MS system, identified as MSSV3. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/21/06 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF for the IC's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

Two CC's dated 6/21/06 and 6/22/06 were analyzed in support of the semivolatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC's were within the acceptance criteria for the CC dated 6/21/06. The %D for 4-Chloroaniline, 3-Nitroaniline, and 4-Nitroaniline associated with the CC dated 6/22/06 exceeded the acceptance criteria. The RRF for the CC's were within the acceptance criteria specified in the method for all target compounds. As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

## **4. BLANKS**

One laboratory semivolatile method blank and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### Method Blank (MB381314)

Bis-(2-ethylhexyl) phthalate (0.953 ppb) was detected in the blank extracted on 6/16/06.

#### Equipment Blank (SK-GWEB -1018)

Bis-(2-ethylhexyl) phthalate (1.60 ppb) was detected in the Equipment Blank collected on 6/15/06. The Bis-(2-ethylhexyl) phthalate detected in the Equipment Blank was mitigated by the presence of Bis-(2-ethylhexyl) phthalate in the associated Method Blank.

### **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported semivolatile system monitoring compounds (SMC) were recovered within acceptable control limits.

### **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

Sample SK-GW58-1018 was submitted for MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol associated with the MS. As per the National Functional Guidelines no action is taken on MS/MSD data alone.

### **7. INTERNAL STANDARDS PERFORMANCE**

Internal standard (IS) areas and Retention Times (RT) were within the acceptance limits for the reported semivolatile samples.

### **8. COMPOUND IDENTIFICATION**

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

### **9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

### **10. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

### **11. DOCUMENTATION**

There was no extraction date or preparation method listed on Form I SV-TIC. The analytical method reported by the GCAL on the Form I SV-TIC was listed as SW-846 8270C when it should have been listed as OLM04.2. The data validator manually made the corrections.

### **12. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
VOLATILE ORGANIC**

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150907	SK-GWTB-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150921	SK-GWTB-1018
20606150922	SK-GWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

## **1. HOLDING TIMES**

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. GC/MS TUNING**

The samples were analyzed one GC/MS system, identified as MSV0. Two bromofluorobenzene (BFB) tunes were run on MSV0. The BFB tunes are acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/20/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards is present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds.

The RRF's and the average RRF for the IC were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone associated with the IC dated 6/20/06. The %RSD's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

Two CCs dated 6/20/06 and 6/21/06 were analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/20/06 were within the acceptance criteria for all target compounds. The CC RRF's for the CC dated 6/20/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/21/06 were within the acceptance criteria for all target compounds with the exception of 1,2,4-Trichlorobenzene. The CC RRF's for the CC dated 6/21/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

If the CC RF is less than the acceptance criteria then qualify detected results with "J" and non-detected results with "R".

#### 4. BLANKS

Two laboratory volatile method blanks, storage blank, Equipment Blank, and two Trip Blanks were analyzed with this SDG. The results are summarized below.

##### MB382289

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/20/06 (1402).

##### MB382601

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/21/06 (1012).

##### Storage Blank (VHBLK)

Methylene chloride (0.19 ppb) was detected in the Storage Blank analyzed on 6/21/06.

##### Equipment Blank (SK-GWEB-1018)

Acetone (4.2 ppb) was detected in the Equipment Blank collected on 6/15/06.

##### Trip Blank (SK-GWTB-1018)

Methylene chloride (0.16 ppb) was detected in the Trip Blank that were shipped on 6/14/06. The Methylene chloride detected in the Trip Blank was mitigated by the presence of Methylene chloride in the Storage Blank.

##### Trip Blank (SK-GWTB-1018)

There were no compounds detected above the Reporting Limit (RL) in the Trip Blank that were shipped on 6/15/06.

#### 5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds (SMC) were recovered within acceptable control limits (80%-120%).

## **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-GW58-1018 was submitted for the MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria. The RPD between the compounds were within the acceptance criteria.

## **7. LABORATORY CONTROL SAMPLE**

One Laboratory Control Sample was analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

## **8. INTERNAL STANDARDS PERFORMANCE**

Internal Standard (IS) areas and retention times were within acceptable limits for the reported volatile sample analyses.

## **9. COMPOUND IDENTIFICATION**

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for VOCs.

## **11. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **12. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

## **13. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

## DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 206061509 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

GCAL #	Sample Description
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018
20606150928	SK-GW58DUP-1018
20606150930	SK-GW63DUPE-1018 (RE)

## INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:



- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3. IC
4. Calibration Verification
5. Blanks
6. Surrogate Spikes
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8. Pesticide Cleanup Checks
9. Target Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were initially extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time. The surrogates for sample SK-GW63DUPE-1018 were not detected therefore the sample was re-extracted. The sample was re-extracted outside the recommended holding times. As per the National Functional Guidelines, if the recommended holding is exceeded then qualify detected results for that sample with "J" and non-detected result with "UJ".

## 2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits. The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM).

The percent breakdown for both 4,4'-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4'-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

## 3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion for Individual standard mixtures A and B were within the acceptance criteria.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%. The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

## 4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows. The percent difference for each of the pesticides and surrogates in the PEM's were within the acceptance criteria of  $\pm 25.0$  percent for the calibration verifications with the exception of PEM03. As per the National Functional Guidelines, if the percent difference is greater than 25 percent for the compound(s) being quantified, qualify all detected results associated with that PEM with "J" and non-detects results with "UJ".

The percent difference for each of the pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures A and B was within the acceptance criteria of  $\pm 25.0$  percent.

## 5. BLANKS

Two laboratory method blanks and an Equipment blank were analyzed with this SDG. The results are summarized below.

### Method Blank 381333

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/16/06.

### Method Blank 383583

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/23/06.

### Equipment Blank SK-GWEB-1018

No constituents were detected above the laboratory-reporting limit in the Equipment Blank collected on 6/15/06.

## 6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria (30% - 150%) for all samples except as follows:

SK-GW07R-1018	DCB (29%)	
SK-GW59-1018	TCX (29%)	
SK-GW63DUPE-1018	TCX (0%)	DCB (0%)
SK-GW63DUPE-1018RE	TCX (0%)	DCB (0%)

As per the National Functional Guidelines, if recoveries are between 10 and 30 percent qualify results greater than the detection limit with "J" and non-detected results with "UJ". If the surrogate is not present and is not do to being diluted out qualify detected results with "J" and non-detected results with "R".

## 7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SK-GW58-1018 was submitted for MS/MSD analysis. All of the percent recoveries associated with the MS were outside of the acceptance criteria and Lindane was outside the acceptance in the MSD. All of the RPD's between the MS/MSD were outside of the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

## 8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

## **9. TARGET COMPOUND IDENTIFICATION**

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported.

## **11. DOCUMENTATION**

The date extracted was not reported on the pesticide method blank summary (Form IV Pest). GCAL did not qualify the results with a "P" that were confirmed by a second column and that had a percent difference of greater than 25% between the two results. The data validator manually made the corrections.

## **12. OVERALL ASSESSMENT**

The results are acceptable as qualified by the data validator.

## **REFERENCES**

US EPA, 1994. *National Functional Guidelines for Inorganic Data Review.*

US EPA, 1999. *National Functional Guidelines for Organic Data Review.*

**DATA VALIDATION REPORT**  
**FOR**  
**SKINNER LANDFILL SITE**  
**EARTH TECH: PROJECT NUMBER 54280**  
**LABORATORY REPORT NUMBER 206061509**  
**PROJECT MANAGER: Ron Rolker**  
**Date: August 22, 2006**  
**Data Validator: Mark Kromis**

## LIST OF ACRONYMS

BFB	Bromofluorobenzene
CC	Continuing Calibration
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blanks
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DFTPP	Decafluorotriphenylphosphine
GC/MS	Gas Chromatograph/Mass Spectrometer
IC	Initial Calibration
ICB	Initial Calibration Blank
IDL	Instrument Detection Limit
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
ILM	Inorganic Analysis Multi-Media Multi-Concentration
INDAM	Individual A Mixture
INDBM	Individual B Mixture
mg/L	milligrams per liter
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OLC	Organic Analysis Low Concentration
OLM	Organic Analysis Multi-Media Multi-Concentration
%D	Percent Difference
% RSD	Percent Relative Standard Deviation
PB	Preparation Blanks
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RRF	Relative Response Factor
SDG	Sample Delivery Group
SOW	Statement of Work
µg/L	micrograms per liter
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
VTSR	Validated Time of Sample Receipt

## DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. The results were reported by GCAL under Sample Delivery Group (SDG) 206061509.

GCAL #	Sample Description
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150909	SK-GW62A-1018 (DISS)
20606150910	SK-GW06R-1018 (DISS)
20606150911	SK-GW07R-1018 (DISS)
20606150912	SK-GW59-1018 (DISS)
20606150913	SK-GW64-1018 (DISS)
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150920	SK-GW58DUP-1018
20606150922	SK-GWEB-1018
20606150923	SK-GW61-1018 (DISS)
20606150924	SK-GW63-1018 (DISS)
20606150925	SK-GW63DUPE-1018 (DISS)
20606150926	SK-GW58-1018 (DISS)
20606150927	SK-GW58MS-1018 (DISS)
20606150928	SK-GW58DUP-1018 (DISS)
20606150929	SK-GWEB-1018 (DISS)

## INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes.



The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

1.     Holding Times
2.     Calibration
  - A. Initial Calibration (IC)
  - B. Continuing Calibration (CC)
3.     Blanks
4.     Inductively Coupled Plasma (ICP) Interference Check Sample
5.     Laboratory Control Sample (LCS)
6.     Duplicate Analysis
7.     Spike Sample Analysis

8. ICP Serial Dilution
9. System Performance
10. Documentation
11. Overall Assessment

## **1. HOLDING TIMES**

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. CALIBRATION**

### **A. Initial Calibration**

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

### **B. Continuing Calibration**

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

## **3. BLANKS**

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

## **4. ICP INTERFERENCE CHECK SAMPLE**

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

## **5. LABORATORY CONTROL SAMPLES**

Recoveries were within the control limit (80-120%) for all constituents.

## **6. DUPLICATE ANALYSIS**

The laboratory used samples SK-GW58-1018 (total and dissolved fractions) for the duplicate samples. The Relative Percent Difference (RPD) between the sample and duplicate results for the total and dissolved fractions were within the acceptance criteria (<20%) for all target analytes.

## **7. SPIKE SAMPLE ANALYSIS**

The laboratory used sample SK-GW58-1018 (total and dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) with the exception of Thallium (72%) in the total fraction and Selenium (70%) in the dissolved fraction.

As per the National Functional Guidelines, if the percent recovery is greater than 30% but less than 75% qualify results greater than the IDL with "J" and non-detected results with "UJ".

## **8. ICP SERIAL DILUTION**

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The serial dilution percent differences were within the acceptance criteria for all target analytes with the exception of Aluminum, Chromium, Potassium, and Zinc associated with the total fraction. As per the National Functional Guidelines, if the serial dilution %D exceeds the acceptance criteria then qualify results associated with that analyte as estimated with a "J".

## **9. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

## **10. DOCUMENTATION**

GCAL qualified the results from the dissolved fraction for Aluminum, Chromium, Potassium, and Zinc with an "E" for being outside of the acceptance criteria for the serial dilution analysis. The percent difference between the sample results and serial dilution results associated with the dissolved fractions were within the acceptance criteria and therefore the results should not have been qualified with an "E" qualifier. GCAL qualified the results from the dissolved fraction for Thallium with an "N" for being outside of the acceptance criteria for the MS recovery. The percent recovery for Thallium associated with the MS was within the acceptance criteria and therefore the results should not have been qualified with an "N" qualifier. The MS recovery for Selenium associated with the dissolved fraction was outside of the acceptance criteria and therefore the results associated with the dissolved fraction should have been qualified with an "N" qualifier. The data validator made the corrections manually.

## **11. OVERALL ASSESSMENT**

The percent recoveries for Silver in the Contract Required Detection Limit (CRDL) standards analyzed on 6/23/06 were 79, 81%, 82%, 82%, and 81%. As per the National Functional Guidelines, if the CRDL is below 80% then detected results are qualified as estimated with "J" and non-detected results with "UJ". The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
SEMIVOLATILE ORGANICS**

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various data qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Internal Standards Performance
8. Compound Identification
9. Constituent Quantitation and Reported Detection Limits
10. System Performance
11. Documentation
12. Overall Assessment

## 1. HOLDING TIMES

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time.

## 2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV3. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

## 3. CALIBRATION

### A. Initial Calibration

One IC dated 6/21/06 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF for the IC's were within the acceptance criteria specified in the method for all target compounds.

### B. Continuing Calibration

Two CC's dated 6/21/06 and 6/22/06 were analyzed in support of the semivolatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC's were within the acceptance criteria for the CC dated 6/21/06. The %D for 4-Chloroaniline, 3-Nitroaniline, and 4-Nitroaniline associated with the CC dated 6/22/06 exceeded the acceptance criteria. The RRF for the CC's were within the acceptance criteria specified in the method for all target compounds. As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

## 4. BLANKS

One laboratory semivolatile method blank and an Equipment Blank were analyzed with this SDG. The results are summarized below.

### Method Blank (MB381314)

Bis-(2-ethylhexyl) phthalate (0.953 ppb) was detected in the blank extracted on 6/16/06.

#### Equipment Blank (SK-GWEB -1018)

Bis-(2-ethylhexyl) phthalate (1.60 ppb) was detected in the Equipment Blank collected on 6/15/06. The Bis-(2-ethylhexyl) phthalate detected in the Equipment Blank was mitigated by the presence of Bis-(2-ethylhexyl) phthalate in the associated Method Blank.

### **5. SYSTEM MONITORING COMPOUND RECOVERY**

All reported semivolatile system monitoring compounds (SMC) were recovered within acceptable control limits.

### **6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)**

Sample SK-GW58-1018 was submitted for MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol associated with the MS. As per the National Functional Guidelines no action is taken on MS/MSD data alone.

### **7. INTERNAL STANDARDS PERFORMANCE**

Internal standard (IS) areas and Retention Times (RT) were within the acceptance limits for the reported semivolatile samples.

### **8. COMPOUND IDENTIFICATION**

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

### **9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

### **10. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

### **11. DOCUMENTATION**

There was no extraction date or preparation method listed on Form I SV-TIC. The analytical method reported by the GCAL on the Form I SV-TIC was listed as SW-846 8270C when it should have been listed as OLM04.2. The data validator manually made the corrections.

### **12. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.



**DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 206061509  
VOLATILE ORGANIC**

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

GCAL #	Sample Description
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150907	SK-GWTB-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150921	SK-GWTB-1018
20606150922	SK-GWEB-1018

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. The laboratory to denote specific information regarding the analytical results uses various qualifier codes. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times
2. GC/MS Tuning
3. Calibration
  - A. IC
  - B. CC
4. Blanks
5. System Monitoring Compound Recovery
6. MS/MSD
7. Laboratory Control Sample
8. Internal Standards Performance
9. Compound Identification
10. Constituent Quantitation and Reported Detection Limits
11. System Performance
12. Documentation
13. Overall Assessment

## **1. HOLDING TIMES**

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

## **2. GC/MS TUNING**

The samples were analyzed one GC/MS system, identified as MSV0. Two bromofluorobenzene (BFB) tunes were run on MSV0. The BFB tunes are acceptable.

## **3. CALIBRATION**

### **A. Initial Calibration**

One IC dated 6/20/06 was analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards is present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds.

The RRF's and the average RRF for the IC were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone associated with the IC dated 6/20/06. The %RSD's were within the acceptance criteria specified in the method for all target compounds.

### **B. Continuing Calibration**

Two CCs dated 6/20/06 and 6/21/06 were analyzed on instrument MSV0 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/20/06 were within the acceptance criteria for all target compounds. The CC RRF's for the CC dated 6/20/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

The percent difference (%D) between the average RRF's and the CC RF's for the CC dated 6/21/06 were within the acceptance criteria for all target compounds with the exception of 1,2,4-Trichlorobenzene. The CC RRF's for the CC dated 6/21/06 were within the acceptance criteria specified in the method for all target compounds with the exception of Acetone.

As per the National Functional Guidelines, if the %D is outside the +/- 25% criteria then qualify positive results with "J" and non-detected results with "UJ".

If the CC RF is less than the acceptance criteria then qualify detected results with "J" and non-detected results with "R".

#### 4. BLANKS

Two laboratory volatile method blanks, storage blank, Equipment Blank, and two Trip Blanks were analyzed with this SDG. The results are summarized below.

##### MB382289

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/20/06 (1402).

##### MB382601

There were no compounds detected above the Reporting Limit (RL) in the method blank analyzed on 6/21/06 (1012).

##### Storage Blank (VHBLK)

Methylene chloride (0.19 ppb) was detected in the Storage Blank analyzed on 6/21/06.

##### Equipment Blank (SK-GWEB-1018)

Acetone (4.2 ppb) was detected in the Equipment Blank collected on 6/15/06.

##### Trip Blank (SK-GWTB-1018)

Methylene chloride (0.16 ppb) was detected in the Trip Blank that were shipped on 6/14/06. The Methylene chloride detected in the Trip Blank was mitigated by the presence of Methylene chloride in the Storage Blank.

##### Trip Blank (SK-GWTB-1018)

There were no compounds detected above the Reporting Limit (RL) in the Trip Blank that were shipped on 6/15/06.

#### 5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds (SMC) were recovered within acceptable control limits (80%-120%).

**6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Sample SK-GW58-1018 was submitted for the MS/MSD analysis. The MS/MSD percent recoveries were within the acceptance criteria. The RPD between the compounds were within the acceptance criteria.

**7. LABORATORY CONTROL SAMPLE**

One Laboratory Control Sample was analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

**8. INTERNAL STANDARDS PERFORMANCE**

Internal Standard (IS) areas and retention times were within acceptable limits for the reported volatile sample analyses.

**9. COMPOUND IDENTIFICATION**

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

**10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported for VOCs.

**11. SYSTEM PERFORMANCE**

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

**12. DOCUMENTATION**

The documentation submitted for review appeared accurate and in order.

**13. OVERALL ASSESSMENT**

The results are acceptable with the validator-added qualifiers.

**DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 206061509  
PESTICIDES**

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in June 2006, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. The results were reported by GCAL under SDG 206061509.

<b>GCAL #</b>	<b>Sample Description</b>
20606150901	SK-GW62A-1018
20606150902	SK-GW06R-1018
20606150903	SK-GW07R-1018
20606150904	SK-GW59-1018
20606150905	SK-GW64-1018
20606150906	SK-GW60-1018
20606150914	SK-GW61-1018
20606150915	SK-GW63-1018
20606150916	SK-GW63DUPE-1018
20606150917	SK-GW58-1018
20606150918	SK-GW58MS-1018
20606150919	SK-GW58MSD-1018
20606150922	SK-GWEB-1018
20606150928	SK-GW58DUP-1018
20606150930	SK-GW63DUPE-1018 (RE)

**INTRODUCTION**

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U     The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J     The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ    The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R     The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

1.     Holding Times
2.     Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
3.     IC
4.     Calibration Verification
5.     Blanks
6.     Surrogate Spikes
7.     Matrix Spike/Matrix Spike Duplicate (MS/MSD)
8.     Pesticide Cleanup Checks
9.     Target Compound Identification
10.    Constituent Quantitation and Reported Detection Limits
11.    Documentation
12.    Overall Assessment

## 1. **HOLDING TIMES**

The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C. All samples were initially extracted within the seven-day technical holding time and the five-day Validated Time of Sample Receipt (VTSR) method holding time. The surrogates for sample SK-GW63DUPE-1018 were not detected therefore the sample was re-extracted. The sample was re-extracted outside the recommended holding times. As per the National Functional Guidelines, if the recommended holding is exceeded then qualify detected results for that sample with "J" and non-detected result with "UJ".

## 2. **GC/ECD INSTRUMENT PERFORMANCE CHECK**

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits. The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM).

The percent breakdown for both 4,4'-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4'-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

## 3. **INITIAL CALIBRATION**

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion for Individual standard mixtures A and B were within the acceptance criteria.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%. The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

## 4. **CALIBRATION VERIFICATION**

Absolute retention times were within appropriate time retention windows. The percent difference for each of the pesticides and surrogates in the PEM's were within the acceptance criteria of  $\pm 25.0$  percent for the calibration verifications with the exception of PEM03. As per the National Functional Guidelines, if the percent difference is greater than 25 percent for the compound(s) being quantified, qualify all detected results associated with that PEM with "J" and non-detects results with "UJ".

The percent difference for each of the pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures A and B was within the acceptance criteria of  $\pm 25.0$  percent.



## 5. BLANKS

Two laboratory method blanks and an Equipment blank were analyzed with this SDG. The results are summarized below.

### Method Blank 381333

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/16/06.

### Method Blank 383583

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 6/23/06.

### Equipment Blank SK-GWEB-1018

No constituents were detected above the laboratory-reporting limit in the Equipment Blank collected on 6/15/06.

## 6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria (30% - 150%) for all samples except as follows:

SK-GW07R-1018	DCB (29%)	
SK-GW59-1018	TCX (29%)	
SK-GW63DUPE-1018	TCX (0%)	DCB (0%)
SK-GW63DUPE-1018RE	TCX (0%)	DCB (0%)

As per the National Functional Guidelines, if recoveries are between 10 and 30 percent qualify results greater than the detection limit with "J" and non-detected results with "UJ". If the surrogate is not present and is not doing to being diluted out qualify detected results with "J" and non-detected results with "R".

## 7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SK-GW58-1018 was submitted for MS/MSD analysis. All of the percent recoveries associated with the MS were outside of the acceptance criteria and Lindane was outside the acceptance in the MSD. All of the RPD's between the MS/MSD were outside of the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

## 8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

## **9. TARGET COMPOUND IDENTIFICATION**

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

## **10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS**

Constituent quantitations were correctly calculated and reported.

## **11. DOCUMENTATION**

The date extracted was not reported on the pesticide method blank summary (Form IV Pest). GCAL did not qualify the results with a "P" that were confirmed by a second column and that had a percent difference of greater than 25% between the two results. The data validator manually made the corrections.

## **12. OVERALL ASSESSMENT**

The results are acceptable as qualified by the data validator.

## REFERENCES

- US EPA, 1994. *National Functional Guidelines for Inorganic Data Review*.
- US EPA, 1999. *National Functional Guidelines for Organic Data Review*.

# **ANALYTICAL RESULTS**

PERFORMED BY

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**Report Date** 07/06/2006

**GCAL Report** 206061509

**Deliver To** Earth Tech  
1455 Old Alabama Rd  
Suite 170  
Roswell, GA 30076  
770-990-1400

**Attn** Mark Kromis

**Customer** Earth Tech

**Project** Skinner Landfill

## **CASE NARRATIVE**

**Client:** Earth Tech      **Report:** 206061509

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **SEMI-VOLATILES MASS CHROMATOGRAPHY**

In the OLM04.2 – CLP Semivolatiles analysis for prep batch 325847, the MS/MSD exhibited sporadic recovery failures. All LCS/LCSD recoveries and RPDs were acceptable. This is attributed to matrix interference.

### **SEMI-VOLATILES GAS CHROMATOGRAPHY**

In the OLM04.2 - CLP Pest/PCB analysis, samples 20606150903 (SK-GW07R-1018) and 20606150904 (SK-GW59-1018) exhibited surrogate recoveries below advisory QC limits.

In the OLM04.2 - CLP Pest/PCB analysis, samples 20606150916 (SK-GW63DUPE-1018) and 20606150930 (SK-GW63DUPE-1018 (RE) exhibited low surrogate recoveries in the primary analysis. This sample was re-extracted and analyzed with a similar surrogate recovery. This is attributed to matrix interference. This sample was re-extracted out of hold time therefore both results are reported.

In the OLM04.2 - CLP Pest/PCB analysis, sample 20606150930 (SK-GW63DUPE-1018 (RE) exhibited low surrogate recoveries in the primary analysis. This sample was re-extracted and analyzed with a similar surrogate recovery. This is attributed to matrix interference. This sample was re-extracted out of hold time therefore both results are reported.

In the OLM04.2 - CLP Pest/PCB analysis for prep batch 325849, the MS/MSD exhibited recovery failures. This is attributed to matrix interference. The MS/MSD exhibited RPD failures.

### **METALS**

In the ILM04.1 - CLP Metals analysis for prep batch 326035, the MS and/or MSD recovery was outside the control limits for Thallium. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference. Aluminum, Chromium, Potassium and Zinc are flagged as estimated due to the fact that the percent difference between the original sample result and the serial dilution result is greater than 10. A chemical or physical interference is suspected.

000002

In the ILM04.1 - CLP Metals analysis for prep batch 326036, the MS and/or MSD recovery was outside the control limits for Selenium. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the ILM04.1 - CLP Metals analysis, the MS recovery is not applicable for Aluminum and Iron for prep batch 326035 because the sample concentration is greater than four times the spike concentration.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

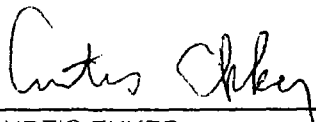
## Reporting Flags Utilized in this Report

<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAP, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.



CURTIS EKKER  
DATA VALIDATION MANAGER  
GCAL REPORT 206061509

THIS REPORT CONTAINS 980 PAGES.

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20606150901	SK-GW62A-1018	Water	06/14/2006 10:20	06/15/2006 09:40
20606150902	SK-GW06R-1018	Water	06/13/2006 14:25	06/15/2006 09:40
20606150903	SK-GW07R-1018	Water	06/13/2006 15:00	06/15/2006 09:40
20606150904	SK-GW59-1018	Water	06/14/2006 09:55	06/15/2006 09:40
20606150905	SK-GW64-1018	Water	06/14/2006 10:40	06/15/2006 09:40
20606150906	SK-GW60-1018	Water	06/14/2006 10:05	06/15/2006 09:40
20606150907	SK-GWTB-1018	Water		06/15/2006 09:40
20606150908	VHBLK	Water		06/15/2006 09:40
20606150909	SK-GW62A-1018 (DISS)	Water	06/14/2006 10:20	06/15/2006 09:40
20606150910	SK-GW06R-1018 (DISS)	Water	06/13/2006 14:25	06/15/2006 09:40
20606150911	SK-GW07R-1018 (DISS)	Water	06/13/2006 15:00	06/15/2006 09:40
20606150912	SK-GW59-1018 (DISS)	Water	06/14/2006 09:55	06/15/2006 09:40
20606150913	SK-GW64-1018 (DISS)	Water	06/14/2006 10:40	06/15/2006 09:40
20606150914	SK-GW61-1018	Water	06/14/2006 14:25	06/16/2006 10:00
20606150915	SK-GW63-1018	Water	06/14/2006 14:55	06/16/2006 10:00
20606150916	SK-GW63DUPE-1018	Water	06/14/2006 15:05	06/16/2006 10:00
20606150917	SK-GW58-1018	Water	06/15/2006 10:05	06/16/2006 10:00
20606150918	SK-GW58MS-1018	Water	06/15/2006 10:10	06/16/2006 10:00
20606150919	SK-GW58MSD-1018	Water	06/15/2006 10:20	06/16/2006 10:00
20606150920	SK-GW58DUP-1018	Water	06/15/2006 10:20	06/16/2006 10:00
20606150921	SK-GWTB-1018	Water		06/16/2006 10:00
20606150922	SK-GWEB-1018	Water	06/15/2006 10:45	06/16/2006 10:00
20606150923	SK-GW61-1018(DISS)	Water	06/14/2006 14:25	06/16/2006 10:00
20606150924	SK-GW63-1018(DISS)	Water	06/14/2006 14:55	06/16/2006 10:00
20606150925	SK-GW63DUPE-1018(DISS)	Water	06/14/2006 15:05	06/16/2006 10:00
20606150926	SK-GW58-1018(DISS)	Water	06/15/2006 10:05	06/16/2006 10:00
20606150927	SK-GW58MS-1018(DISS)	Water	06/15/2006 10:10	06/16/2006 10:00
20606150928	SK-GW58DUP-1018(DISS)	Water	06/15/2006 10:20	06/16/2006 10:00
20606150929	SK-GWEB-1018(DISS)	Water	06/15/2006 10:45	06/16/2006 10:00
20606150930	SK-GW63DUPE-1018 (RE)	Water	06/14/2006 15:05	06/16/2006 10:00



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW62A-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150901

Level: (low/med)

Lab File ID: 2060620/V3538

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1020

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1501

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

7-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
103-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

8/29/06  
mca

000017

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW62A-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150901

Level: (low/med)

Lab File ID: 2060620/V3538

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1020

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1501

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW62A-1018

Lab Name: GCAL Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150901

Sample wt/vol: Units:

Lab File ID: 2060620/v3538

Level: (low/med)

Date Collected: 06/14/06 Time: 1020

% Moisture: not dec.

Date Received: 06/15/06

GC Column: DB-624-30M ID: .53 (mm)

Date Analyzed: 06/20/06 Time: 1501

Instrument ID: MSV0

Dilution Factor: 1 Analyst: ABD

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO. COMPOUND

RT

EST. CONC.

Q

1. No tics detected

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW06R-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150902

Level: (low/med)

Lab File ID: 2060620/V3539

% Moisture: not dec.

Date Collected: 06/13/06

Time: 1425

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1524

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
37-66-3	Chloroform	1.0	U	0.010	1.0
74-37-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

8/25/06

000024

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW06R-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150902

Level: (low/med)

Lab File ID: 2060620/V3539

% Moisture: not dec.

Date Collected: 06/13/06

Time: 1425

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1524

Soi Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soi Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

FORM 1 VOA

000025

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW06R-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150902  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3539  
Level: (low/med) Date Collected: 06/13/06 Time: 1425  
% Moisture: not dec. Date Received: 06/15/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 1524  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: ABD  
Sol Extract Volume: \_\_\_\_\_ (µL)  
Sol Aliquot Volume: \_\_\_\_\_ (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW07R-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150903

Level: (low/med)

Lab File ID: 2060620/V3540

% Moisture: not dec.

Date Collected: 06/13/06

Time: 1500

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1548

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

8/23/06  
mm

000031

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW07R-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150903

Level: (low/med)

Lab File ID: 2060620/V3540

% Moisture: not dec.

Date Collected: 06/13/06

Time: 1500

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1548

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

FORM 1 VOA

000032



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW07R-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150903  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3540  
Level: (low/med) Date Collected: 06/13/06 Time: 1500  
% Moisture: not dec. Date Received: 06/15/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 1548  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: ABD  
Soil Extract Volume: \_\_\_\_\_ (  $\mu$ L )  
Soil Aliquot Volume: \_\_\_\_\_ (  $\mu$ L )

Number TICs Found: 1

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
109-99-9	Furan, tetrahydro-	4.436	1.44	

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW59-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150904

Level: (low/med)

Lab File ID: 2060620/V3541

% Moisture: not dec.

Date Collected: 06/14/06

Time: 0955

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1611

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: µg/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
103-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

8/23/04  
m2

000039

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW59-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150904

Level: (low/med)

Lab File ID: 2060620/V3541

% Moisture: not dec.

Date Collected: 06/14/06

Time: 0955

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1611

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW59-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150904  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3541  
Level: (low/med) Date Collected: 06/14/06 Time: 0955  
% Moisture: not dec. Date Received: 06/15/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 1611  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: ABD  
Soi Extract Volume: \_\_\_\_\_ (µL)  
Soil Aliquot Volume: \_\_\_\_\_ (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW64-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150905

Level: (low/med)

Lab File ID: 2060620/V3543

% Moisture: not dec.

Date Collected: 06/14/06 Time: 1040

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06 Time: 1658

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW64-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: (soil/water) Water  
Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606150905  
Level: (low/med) Lab File ID: 2060620/V3543  
% Moisture: not dec. Date Collected: 06/14/06 Time: 1040  
GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/15/06  
Instrument ID: MSV0 Date Analyzed: 06/20/06 Time: 1658  
Soil Extract Volume: (µL) Dilution Factor: 1 Analyst: ABD  
Soil Aliquot Volume: (µL) Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW64-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150905

Sample wt/vol: Units:

Lab File ID: 2060620/v3543

Level: (low/med)

Date Collected: 06/14/06

Time: 1040

% Moisture: not dec.

Date Received: 06/15/06

GC Column: DB-624-30M

ID: .53

(mm)

Date Analyzed: 06/20/06

Time: 1658

Instrument ID: MSV0

Dilution Factor: 1

Analyst: ABD

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO. COMPOUND

RT

EST. CONC.

Q

1.	No tics detected			
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW60-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150906

Level: (low/med)

Lab File ID: 2060620/V3544

% Moisture: not dec.

Date Collected: 06/14/06 Time: 1005

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06 Time: 1721

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW60-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150906

Level: (low/med)

Lab File ID: 2060620/V3544

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1005

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1721

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW60-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150906

Sample wt/vol:

Units:

Lab File ID: 2060620/V3544

Level: (low/med)

Date Collected: 06/14/06

Time: 1005

% Moisture: not dec.

Date Received: 06/15/06

GC Column: DB-624-30M

ID: .53

(mm)

Date Analyzed: 06/20/06

Time: 1721

Instrument ID: MSV0

Dilution Factor: 1

Analyst: ABD

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150907

Level: (low/med)

Lab File ID: 2060621/V3574

% Moisture: not dec.

Date Collected:

Time:

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/15/06

Instrument ID: MSV0

Date Analyzed: 06/21/06

Time: 1726

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: JCK

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326150

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606150907  
 Level: (low/med) Lab File ID: 2060621/V3574  
 % Moisture: not dec. Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/15/06  
 Instrument ID: MSV0 Date Analyzed: 06/21/06 Time: 1726  
 Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 1 Analyst: JCK  
 Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 326150  
 Analytical Method: OLCO 2.1  
 CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.5 0.18	J	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

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1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150907

Sample wt/vol:

Units:

Lab File ID: 2060621/v3574

Level: (low/med)

Date Collected:

Time:

% Moisture: not dec.

Date Received: 06/15/06

GC Column: DB-624-30M

ID: .53

(mm)

Date Analyzed: 06/21/06

Time: 1726

Instrument ID: MSV0

Dilution Factor: 1

Analyst: JCK

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW61-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150914

Level: (low/med)

Lab File ID: 2060620/V3548

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1425

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1857

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: µg/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
73-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW61-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150914

Level: (low/med)

Lab File ID: 2060620/V3548

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1425

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1857

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND

RESULT

Q

MDL

RL

75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW61-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150914

Sample wt/vol:

Units:

Lab File ID: 2060620/v3548

Level: (low/med)

Date Collected: 06/14/06

Time: 1425

% Moisture: not dec.

Date Received: 06/16/06

GC Column: DB-624-30M

ID: .53

(mm)

Date Analyzed: 06/20/06

Time: 1857

Instrument ID: MSV0

Dilution Factor: 1

Analyst: ABD

So I Extract Volume: (  $\mu$ L )

So I Aliquot Volume: (  $\mu$ L )

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW63-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150915

Level: (low/med)

Lab File ID: 2060620/V3549

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1455

GC Column: DB-624-30M

ID: .53

(mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1920

Soi Extract Volume:

(µL)

Dilution Factor: 1

Analyst: ABD

Soi Aliquot Volume:

(µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO. COMPOUND RESULT Q MDL RL

71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

5/24/06  
p.m.

000081

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW63-1018

Lab Name: GCAL

Contract:

Lat Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150915

Level: (low/med)

Lab File ID: 2060620/V3549

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1455

GC Column: DB-624-30M

ID: .53

(mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1920

Soi. Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soi. Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
73-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW63-1018

Lab Name: GCAL Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150915

Sample wt/vol: Units:

Lab File ID: 2060620/v3549

Level: (low/med)

Date Collected: 06/14/06

Time: 1455

% Moisture: not dec.

Date Received: 06/16/06

GC Column: DB-624-30M ID: .53 (mm)

Date Analyzed: 06/20/06

Time: 1920

Instrument ID: MSV0

Dilution Factor: 1

Analyst: ABD

Soil Extract Volume: (µL)

Soil Aliquot Volume: (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW63DUPE-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150916

Level: (low/med)

Lab File ID: 2060620/V3550

% Moisture: not dec.

Date Collected: 06/14/06 Time: 1505

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06 Time: 1943

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
53-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

FORM 1 VOA

8/23/06  
m.c.

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW63DUPE-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150916

Level: (low/med)

Lab File ID: 2060620/V3550

% Moisture: not dec.

Date Collected: 06/14/06

Time: 1505

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1943

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJO

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW63DUPE-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150916  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3550  
Level: (low/med) Date Collected: 06/14/06 Time: 1505  
% Moisture: not dec. Date Received: 06/16/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 1943  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: RJO  
Soil Extract Volume: \_\_\_\_\_ (µL)  
Soil Aliquot Volume: \_\_\_\_\_ (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW58-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150917

Level: (low/med)

Lab File ID: 2060620/V3542

% Moisture: not dec.

Date Collected: 06/15/06

Time: 1005

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 1634

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
73-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM 1 VOA

8/29/06  
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GW58-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150917

Level: (low/med)

Lab File ID: 2060620/V3542

% Moisture: not dec.

Date Collected: 06/15/06 Time: 1005

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06 Time: 1634

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: ABD

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0



1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GW58-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150917  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3542  
Level: (low/med) Date Collected: 06/15/06 Time: 1005  
% Moisture: not dec. Date Received: 06/16/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 1634  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: ABD  
Soil Extract Volume: \_\_\_\_\_ (  $\mu$ L )  
Soil Aliquot Volume: \_\_\_\_\_ (  $\mu$ L )

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150921

Level: (low/med)

Lab File ID: 2060620/V3551

% Moisture: not dec.

Date Collected:

Time:

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 2007

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJO

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
78-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	5.0	U	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

R

FORM I VOA

8/29/06  
R

000102

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: (soil/water) Water  
 Sample wt/vol: 25 (g/ml) mL Lab Sample ID: 20606150921  
 Level: (low/med) \_\_\_\_\_ Lab File ID: 2060620/V3551  
 % Moisture: not dec. \_\_\_\_\_ Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 GC Column: DB-624-30M ID: .53 (mm) Date Received: 06/16/06  
 Instrument ID: MSV0 Date Analyzed: 06/20/06 Time: 2007  
 Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 1 Analyst: RJO  
 Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 326085  
 CONCENTRATION UNITS: ug/L Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GWTB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: Water

Lab Sample ID: 20606150921

Sample wt/vol:

Units:

Lab File ID: 2060620/v3551

Level: (low/med)

Date Collected:

Time:

% Moisture: not dec.

Date Received: 06/16/06

GC Column: DB-624-30M

ID: .53

(mm)

Date Analyzed: 06/20/06

Time: 2007

Instrument ID: MSV0

Dilution Factor: 1

Analyst: RJO

Soil Extract Volume:

( $\mu$ L)

Soil Aliquot Volume:

( $\mu$ L)

Number TICs Found: 2

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 811-97-2	Norflurane	1.188	3.52	
2. 75-19-4	Unknown	1.792	.309	

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWEB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150922

Level: (low/med)

Lab File ID: 2060620/V3552

% Moisture: not dec.

Date Collected: 06/15/06 Time: 1045

GC Column: DB-624-30M ID: .53 (mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06 Time: 2030

Soil Extract Volume: (µL)

Dilution Factor: 1 Analyst: RJO

Soil Aliquot Volume: (µL)

Prep Batch: Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	0.010	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	0.010	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	0.010	1.0
75-34-3	1,1-Dichloroethane	1.0	U	0.010	1.0
75-35-4	1,1-Dichloroethene	1.0	U	0.010	1.0
120-82-1	1,2,4-Trichlorobenzene	1.0	U	0.010	1.0
106-93-4	1,2-Dibromoethane	1.0	U	0.010	1.0
95-50-1	1,2-Dichlorobenzene	1.0	U	0.010	1.0
107-06-2	1,2-Dichloroethane	1.0	U	0.010	1.0
540-59-0	1,2-Dichloroethene	1.0	U	0.010	1.0
73-87-5	1,2-Dichloropropane	1.0	U	0.010	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	0.010	1.0
106-46-7	1,4-Dichlorobenzene	1.0	U	0.010	1.0
78-93-3	2-Butanone	5.0	U	0.010	5.0
591-78-6	2-Hexanone	5.0	U	0.010	5.0
108-10-1	4-Methyl-2-pentanone	5.0	U	0.010	5.0
67-64-1	Acetone	4.2	J	0.010	5.0
71-43-2	Benzene	1.0	U	0.010	1.0
75-27-4	Bromodichloromethane	1.0	U	0.010	1.0
75-25-2	Bromoform	1.0	U	0.010	1.0
74-83-9	Bromomethane	1.0	U	0.010	1.0
75-15-0	Carbon disulfide	1.0	U	0.010	1.0
56-23-5	Carbon tetrachloride	1.0	U	0.010	1.0
108-90-7	Chlorobenzene	1.0	U	0.010	1.0
75-00-3	Chloroethane	1.0	U	0.010	1.0
67-66-3	Chloroform	1.0	U	0.010	1.0
74-87-3	Chloromethane	1.0	U	0.010	1.0
124-48-1	Dibromochloromethane	1.0	U	0.010	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	0.010	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	0.010	1.0
100-41-4	Ethylbenzene	1.0	U	0.010	1.0

FORM 1 VOA

8/28/06  
JRC

000111

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SK-GWEB-1018

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 206061509

Matrix: (soil/water) Water

Sample wt/vol: 25 (g/ml) mL

Lab Sample ID: 20606150922

Level: (low/med)

Lab File ID: 2060620/V3552

% Moisture: not dec.

Date Collected: 06/15/06

Time: 1045

GC Column: DB-624-30M

ID: .53

(mm)

Date Received: 06/16/06

Instrument ID: MSV0

Date Analyzed: 06/20/06

Time: 2030

SoI Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJO

SoI Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 326085

CONCENTRATION UNITS: ug/L

Analytical Method: OLCO 2.1

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
75-09-2	Methylene chloride	2.0	U	0.010	2.0
100-42-5	Styrene	1.0	U	0.010	1.0
127-18-4	Tetrachloroethene	1.0	U	0.010	1.0
108-88-3	Toluene	1.0	U	0.010	1.0
79-01-6	Trichloroethene	1.0	U	0.010	1.0
75-01-4	Vinyl chloride	1.0	U	0.010	1.0
1330-20-7	Xylene (total)	1.0	U	0.010	1.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SK-GWEB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water Lab Sample ID: 20606150922  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_ Lab File ID: 2060620/v3552  
Level: (low/med) Date Collected: 06/15/06 Time: 1045  
% Moisture: not dec. Date Received: 06/16/06  
GC Column: DB-624-30M ID: .53 (mm) Date Analyzed: 06/20/06 Time: 2030  
Instrument ID: MSV0 Dilution Factor: 1 Analyst: RJO  
Soil Extract Volume: \_\_\_\_\_ (µL)  
Soil Aliquot Volume: \_\_\_\_\_ (µL)

Number TICs Found: 0

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	No tics detected			

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW62A-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2072

Matrix: Water

Lab Sample ID: 20606150901

Sample wt/vol: 1000

Units: mL

Date Collected: 06/14/06

Time: 1020

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1732

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume:

1.0

(µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO. COMPOUND

RESULT

Q

MDL

RL

95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW62A-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2072

Matrix: Water

Lab Sample ID: 20606150901

Sample wt/vol: 1000

Units: mL

Date Collected: 06/14/06

Time: 1020

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1732

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume: 1.0

(µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: µg/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO. COMPOUND

RESULT

Q

MDL

RL

117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-34-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW62A-1018  
Lab Code: LA024 Case No.: Contract:  
SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2072  
Matrix: Water Lab Sample ID: 20606150901  
Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1020  
Level: (low/med) LOW Date Received: 06/15/06  
% Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1732  
Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
Lab Code: LA024 Case No.:  
SAS No.: SDG No.: 206061509  
Matrix: Water  
Sample wt/vol: Units:  
Level: (low/med)  
% Moisture: not dec.  
GC Column: DB-5MS-30M ID: .25 (mm)  
Concentrated Extract Volume: 1000 (µL)  
Injection Volume: 1.0 (µL)  
GPC Cleanup: (Y/N) N pH:

Sample ID: SK-GW62A-1018  
Contract:  
Lab File ID: 2060621/B2072  
Lab Sample ID: 20606150901  
Date Collected: 06/14/06 Time: 1020  
Date Received: 06/15/06  
Date Extracted: 6/16/06  
Date Analyzed: 06/21/06 Time: 1732  
Dilution Factor: 1 Analyst: JAR3  
Prep Method: OLM 4.2 SVSA  
Analytical Method: ~~SW-846-82700~~ OLM 4.2  
Instrument ID: MSSV3

Number TICs Found : 10

CONCENTRATION UNITS:ug/L

8/23/06  
pic

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.336	10.4	
2.	2842-38-8	Ethanol, 2-(cyclohexylamino)-	5.575	123	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	18.6	
4.	21400-25-9	1-Propene, 1,1,2-trichloro-	1.139	3.27	
5.	111-46-6	Ethanol, 2,2'-oxybis-	1.286	4.03	
6.	104-76-7	1-Hexanol, 2-ethyl-	1.655	4.14	
7.	1679-49-8	2(3H)-Furanone, dihydro-4-meth	1.783	3.32	
8.	10316-79-7	Cyclopentanemethanol, 1-amino-	2.799	1.67	
9.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.012	11.5	
10.	7098-21-7	Tritetracontane	4.198	1.84	

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW06R-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2073

Matrix: Water

Lab Sample ID: 20606150902

Sample wt/vol: 1000 Units: mL

Date Collected: 06/13/06 Time: 1425

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1747

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW06R-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2073

Matrix: Water

Lab Sample ID: 20606150902

Sample wt/vol: 1000 Units: mL

Date Collected: 06/13/06 Time: 1425

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1747

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0 <del>143</del>	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

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p. 2

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW06R-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2073  
 Matrix: Water Lab Sample ID: 20606150902  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/13/06 Time: 1425  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1747  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL Sample ID: SK-GW06R-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2073  
 Matrix: Water Lab Sample ID: 20606150902  
 Sample wt/vol: Units: Date Collected: 06/13/06 Time: 1425  
 Level: (low/med) Date Received: 06/15/06  
 % Moisture: not dec. Date Extracted: 6/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1747  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM 4.2 SUCA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: SW-846-8270C OLM 4.2  
 Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS:ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.336	11.3	
2.	1003-41-4	4H-Thiopyran-4-one	5.515	21.2	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	20	
4.	4023-39-6	Boraneamine, N,N,1,1-tetraethyl	.954	.629	
5.	497-26-7	1,3-Dioxolane, 2-methyl-	1.607	.697	
6.	3274-29-1	Heptanoic acid, 2-ethyl-	2.073	.548	
7.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.012	10.4	
8.	22058-71-5	Methylamine, N-(1-methylhexyl)	3.764	.692	
9.	21678-54-6	Bicyclo[2.2.1]hept-5-ene-2,3-d	4.88	.672	
10.	10544-50-0	Sulfur, mol. (S8)	5.121	.572	

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW07R-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2074  
 Matrix: Water Lab Sample ID: 20606150903  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/13/06 Time: 1500  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1802  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 325847 Analytical Batch: 326170

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
86-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-3	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-3	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW07R-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2074  
 Matrix: Water Lab Sample ID: 20606150903  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/13/06 Time: 1500  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1802  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CONCENTRATION UNITS: ug/L Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
113-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
103-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW07R-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2074

Matrix: Water

Lab Sample ID: 20606150903

Sample wt/vol: 1000 Units: mL

Date Collected: 06/13/06 Time: 1500

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1802

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: Water

Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_

Level: (low/med) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-5MS-30M ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW07R-1018

Contract: \_\_\_\_\_

Lab File ID: 2060621/B2074

Lab Sample ID: 20606150903

Date Collected: 06/13/06 Time: 1500

Date Received: 06/15/06

Date Extracted: 6/16/06

Date Analyzed: 06/21/06 Time: 1802

Dilution Factor: 1 Analyst: JAR3

Prep Method: OLM 4.2 S00A

Analytical Method: SW-846-8270C OLM 04.2

Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	10	
2.	21678-54-6	Bicyclo[2.2.1]hept-5-ene-2,3-d	4.879	.661	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.344	20.3	
4.	75-09-2	Methylene Chloride	.792	.457	
5.	2439-13-6	Piperidine, 1,2,6-trimethyl-	.951	.641	
6.	21400-25-9	1-Propene, 1,1,2-trichloro-	1.139	2.62	
7.	541-02-6	Cyclopentasiloxane, decamethyl	2.155	.47	
8.	0-00-0	Phenol, 2-fluoro-4-nitro-	2.243	.306	
9.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.012	8.61	
10.	96346-76-8	trans-2-Methyl-4-hexen-3-ol	3.764	.49	

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW59-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2075

Matrix: Water

Lab Sample ID: 20606150904

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06

Time: 0955

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06

Time: 1818

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO. COMPOUND

RESULT

Q

MDL

RL

95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW59-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2075

Matrix: Water

Lab Sample ID: 20606150904

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 0955

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1818

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GFC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0 <del>1.05</del>	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
13'-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW59-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2075

Matrix: Water

Lab Sample ID: 20606150904

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 0955

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1818

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
 Lab Code: LA024 Case No.:  
 SAS No.: SDG No.: 206061509  
 Matrix: Water  
 Sample wt/vol: Units:  
 Level: (low/med)  
 % Moisture: not dec.  
 GC Column: DB-5MS-30M ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH:

Sample ID: SK-GW59-1018  
 Contract:  
 Lab File ID: 2060621/B2075  
 Lab Sample ID: 20606150904  
 Date Collected: 06/14/06 Time: 0955  
 Date Received: 06/15/06  
 Date Extracted: 6/16/06  
 Date Analyzed: 06/21/06 Time: 1818  
 Dilution Factor: 1 Analyst: JAR3  
 Prep Method: OCM 4.2 SV 0.2  
 Analytical Method: SW-846 8270C OCM 04.2  
 Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS:ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.335	10.3	
2.	2439-13-6	Piperidine, 1,2,6-trimethyl-,	5.557	118	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.346	18	
4.	123-91-1	1,4-Dioxane	.38	.559	
5.	104-76-7	1-Hexanol, 2-ethyl-	1.655	.557	
6.	105-60-2	Caprolactam	2.694	.609	
7.	78-26-2	1,3-Propanediol, 2-methyl-2-pr	2.799	1.19	
8.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.009	10.1	
9.	22058-71-5	Methylamine, N-(1-methylhexyli	3.764	.632	
10.	3389-71-7	Bicyclo[2.2.1]hepta-2,5-diene,	4.876	.653	

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW64-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2076

Matrix: Water

Lab Sample ID: 20606150905

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 1040

Level (low/med) LOW

Date Received: 06/15/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1833

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH.

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
603-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW64-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2076  
 Matrix: Water Lab Sample ID: 20606150905  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1040  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1833  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

8/15/06  
AK

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW64-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2076  
 Matrix: Water Lab Sample ID: 20606150905  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1040  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1833  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
85-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: Water  
 Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_  
 Level: (low/med) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-5MS-30M ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW64-1018  
 Contract: \_\_\_\_\_  
 Lab File ID: 2060621/B2076  
 Lab Sample ID: 20606150905  
 Date Collected: 06/14/06 Time: 1040  
 Date Received: 06/15/06  
 Date Extracted: 6/16/06  
 Date Analyzed: 06/21/06 Time: 1833  
 Dilution Factor: 1 Analyst: JAR3  
 Prep Method: OLM 04.2 SWA  
 Analytical Method: SW 846-8270C OLM 04.2  
 Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: µg/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	10.4	
2.	0-00-0	2-Ethyl-3-methylcyclopentene	7.658	39.5	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.344	11.2	
4.	18707-60-3	2-Butenoic acid, methyl ester	1.079	3.49	
5.	74381-40-1	Propanoic acid, 2-methyl-, 1-(	3.012	9.67	
6.	57-10-3	Hexadecanoic acid	4.766	2.86	
7.	42786-04-9	1H-1,2,4-Triazol-3-amine, 1-et	5.513	30.8	
8.	4549-12-6	1-Naphthalenepropanol, .alpha.	7.326	8.02	
9.	7144-08-3	Cholest-5-en-3-ol (3.beta.)-,	7.437	2.82	
10.	126-52-3	Ethinamate	7.565	4.99	

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW60-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2077  
 Matrix: Water Lab Sample ID: 20606150906  
 Sample wt/vol: 870 Units: mL Date Collected: 06/14/06 Time: 1005  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1849  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	11.5	U	0.011	11.5
88-06-2	2,4,6-Trichlorophenol	11.5	U	0.011	11.5
120-83-2	2,4-Dichlorophenol	11.5	U	0.011	11.5
51-28-5	2,4-Dinitrophenol	28.7	U	0.011	28.7
121-14-2	2,4-Dinitrotoluene	11.5	U	0.011	11.5
606-20-2	2,6-Dinitrotoluene	11.5	U	0.011	11.5
91-58-7	2-Chloronaphthalene	11.5	U	0.011	11.5
95-57-8	2-Chlorophenol	11.5	U	0.011	11.5
91-57-6	2-Methylnaphthalene	11.5	U	0.011	11.5
88-74-4	2-Nitroaniline	28.7	U	0.011	28.7
88-75-5	2-Nitrophenol	11.5	U	0.011	11.5
91-94-1	3,3'-Dichlorobenzidine	11.5	U	0.011	11.5
99-09-2	3-Nitroaniline	28.7	U	0.011	28.7
534-52-1	2-Methyl-4,6-dinitrophenol	28.7	U	0.011	28.7
59-50-7	4-Chloro-3-methylphenol	11.5	U	0.011	11.5
106-47-8	4-Chloroaniline	11.5	U	0.011	11.5
7005-72-3	4-Chlorophenyl-phenylether	11.5	U	0.011	11.5
106-44-5	4-Methylphenol (p-Cresol)	11.5	U	0.011	11.5
83-32-9	Acenaphthene	11.5	U	0.011	11.5
208-96-8	Acenaphthylene	11.5	U	0.011	11.5
120-12-7	Anthracene	11.5	U	0.011	11.5
56-55-3	Benzo(a)anthracene	11.5	U	0.011	11.5
50-32-8	Benzo(a)pyrene	11.5	U	0.011	11.5
205-99-2	Benzo(b)fluoranthene	11.5	U	0.011	11.5
191-24-2	Benzo(g,h,i)perylene	11.5	U	0.011	11.5
207-08-9	Benzo(k)fluoranthene	11.5	U	0.011	11.5
111-91-1	Bis(2-Chloroethoxy)methane	11.5	U	0.011	11.5
111-44-4	Bis(2-Chloroethyl)ether	11.5	U	0.011	11.5
108-60-1	bis(2-Chloroisopropyl)ether	11.5	U	0.011	11.5

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW60-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2077

Matrix: Water

Lab Sample ID: 20606150906

Sample wt/vol: 870

Units: mL

Date Collected: 06/14/06

Time: 1005

Level: (low/med) LOW

Date Received: 06/15/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1849

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume:

1.0

(µL)

Prep Method: OLM4.2 SVOA

GFC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0128	JB	0.011	11.5
101-55-3	4-Bromophenyl-phenylether	11.5	U	0.011	11.5
85-68-7	Butylbenzylphthalate	11.5	U	0.011	11.5
86-74-8	Carbazole	11.5	U	0.011	11.5
213-01-9	Chrysene	11.5	U	0.011	11.5
84-74-2	Di-n-butylphthalate	11.5	U	0.011	11.5
117-84-0	Di-n-octylphthalate	11.5	U	0.011	11.5
53-70-3	Dibenz(a,h)anthracene	11.5	U	0.011	11.5
132-64-9	Dibenzofuran	11.5	U	0.011	11.5
84-66-2	Diethylphthalate	11.5	U	0.011	11.5
131-11-3	Dimethyl-phthalate	11.5	U	0.011	11.5
105-67-9	2,4-Dimethylphenol	11.5	U	0.011	11.5
206-44-0	Fluoranthene	11.5	U	0.011	11.5
86-73-7	Fluorene	11.5	U	0.011	11.5
118-74-1	Hexachlorobenzene	11.5	U	0.011	11.5
87-68-3	Hexachlorobutadiene	11.5	U	0.011	11.5
77-47-4	Hexachlorocyclopentadiene	11.5	U	0.011	11.5
67-72-1	Hexachloroethane	11.5	U	0.011	11.5
193-39-5	Indeno(1,2,3-cd)pyrene	11.5	U	0.011	11.5
78-59-1	Isophorone	11.5	U	0.011	11.5
91-20-3	Naphthalene	11.5	U	0.011	11.5
100-01-6	4-Nitroaniline	28.7	U	0.011	28.7
98-95-3	Nitrobenzene	11.5	U	0.011	11.5
100-02-7	4-Nitrophenol	28.7	U	0.011	28.7
87-86-5	Pentachlorophenol	28.7	U	0.011	28.7
85-01-8	Phenanthrene	11.5	U	0.011	11.5
108-95-2	Phenol	11.5	U	0.011	11.5
129-00-0	Pyrene	11.5	U	0.011	11.5
621-64-7	N-Nitroso-di-n-propylamine	11.5	U	0.011	11.5

8/23/06  
MSK

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW60-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2077  
 Matrix: Water Lab Sample ID: 20606150906  
 Sample wt/vol: 870 Units: mL Date Collected: 06/14/06 Time: 1005  
 Level: (low/med) LOW Date Received: 06/15/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1849  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CONCENTRATION UNITS: ug/L Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	11.5	U	0.011	11.5
95-48-7	o-Cresol	11.5	U	0.011	11.5

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: Water  
 Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_  
 Level: (low/med) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-5MS-30M ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW60-1018  
 Contract: \_\_\_\_\_  
 Lab File ID: 2060621/B2077  
 Lab Sample ID: 20606150906  
 Date Collected: 06/14/06 Time: 1005  
 Date Received: 06/15/06  
 Date Extracted: 6/16/06  
 Date Analyzed: 06/21/06 Time: 1849  
 Dilution Factor: 1 Analyst: JAR3  
 Prep Method: OLM 4.2 SVOA  
 Analytical Method: SW-846 8270C OLM 04.2  
 Instrument ID: MSSV3

Number TICs Found: 9

CONCENTRATION UNITS: ug/L

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msu

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.336	12.6	
2.	60766-00-9	Butenol, methyl-	1.079	1.59	
3.	18495-30-2	Propane, 1,1,2,3-tetrachloro-	1.139	4.96	
4.	5441-52-1	Cyclohexanol, 3,5-dimethyl-	2.544	6.58	
5.	398-23-2	1,1'-Biphenyl, 4,4'-difluoro-	3.06	1.86	
6.	55255-90-8	5-Azulenemethanol, 1,2,3,3a,4,	3.134	1.15	
7.	62016-37-9	Octane, 2,4,6-trimethyl-	4.02	1.9	
8.	112-39-0	Hexadecanoic acid, methyl este	4.675	1.65	
9.	5129-61-3	Heptadecanoic acid, 16-methyl-	5.163	3.8	

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW61-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2078

Matrix: Water

Lab Sample ID: 20606150914

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 1425

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1904

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GFC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lap Name: GCAL Sample ID: SK-GW61-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2078  
 Matrix: Water Lab Sample ID: 20606150914  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1425  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1904  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0 <del>2.08</del>	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW61-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No: SDG No.: 206061509 Lab File ID: 2060621/B2078  
 Matrix: Water Lab Sample ID: 20606150914  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1425  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1904  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 CONCENTRATION UNITS: ug/L Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
Lab Code: LA024 Case No.: \_\_\_\_\_  
SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: Water  
Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_  
Level: (low/med) \_\_\_\_\_  
% Moisture: not dec. \_\_\_\_\_  
GC Column: DB-5MS-30M ID: .25 (mm)  
Concentrated Extract Volume: 1000 (µL)  
Injection Volume: 1.0 (µL)  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW61-1018  
Contract: \_\_\_\_\_  
Lab File ID: 2060621/B2078  
Lab Sample ID: 20606150914  
Date Collected: 06/14/06 Time: 1425  
Date Received: 06/16/06  
Date Extracted: 6/16/06  
Date Analyzed: 06/21/06 Time: 1904  
Dilution Factor: 1 Analyst: JAR3  
Prep Method: OLM 4.2 SSSA  
Analytical Method: SW-846-8270C OLM 04.2  
Instrument ID: MSSV3

Number TICs Found : 9

CONCENTRATION UNITS: ug/L

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	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	10.6	
2.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	20.8	
3.	931-56-6	1-Methoxycyclohexane	1.082	2.33	
4.	96-19-5	1-Propene, 1,2,3-trichloro-	1.136	4.39	
5.	18146-00-4	Allyloxytrimethylsilane	2.737	4.5	
6.	105-42-0	2-Hexanone, 4-methyl-	2.788	2.19	
7.	112-73-2	Butane, 1,1'-[oxybis(2,1-ethan	2.969	1.51	
8.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.012	8.44	
9.	115-28-6	Bicyclo[2.2.1]hept-5-ene-2,3-d	4.879	4.23	

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW63DUPE-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2080  
 Matrix: Water Lab Sample ID: 20606150916  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/14/06 Time: 1505  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1935  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW63DUPE-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2080

Matrix: Water

Lab Sample ID: 20606150916

Sample wt/vol: 1000

Units: mL

Date Collected: 06/14/06

Time: 1505

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1935

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume:

1.0

(µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

## CAS NO. COMPOUND

## RESULT

## Q

## MDL

## RL

117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-56-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW63DUPE-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2080

Matrix: Water

Lab Sample ID: 20606150916

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 1505

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1935

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: Water  
 Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_  
 Level: (low/med) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-5MS-30M ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW63DUPE-1018  
 Contract: \_\_\_\_\_  
 Lab File ID: 2060621/B2080  
 Lab Sample ID: 20606150916  
 Date Collected: 06/14/06 Time: 1505  
 Date Received: 06/16/06  
 Date Extracted: 6/16/06  
 Date Analyzed: 06/21/06 Time: 1935  
 Dilution Factor: 1 Analyst: JAR3  
 Prep Method: OLM 4.2 SDA  
 Analytical Method: SW-846-8270C OLM 4.2  
 Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: ug/L

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	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.335	9.94	
2.	5129-61-3	Heptadecanoic acid, 16-methyl-	7.842	14.6	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	18.6	
4.	111-21-7	Ethanol, 2,2'-[1,2-ethanediylb	.361	7.58	
5.	111-46-6	Ethanol, 2,2'-oxybis-	1.315	11.4	
6.	816-19-3	Hexanoic acid, 2-ethyl-, methy	2.592	2.53	
7.	20325-97-7	Hydrazine, 1-ethyl-1-(1-methyl	2.694	3.26	
8.	74367-33-2	Propanoic acid, 2-methyl-, 2,2	3.017	12.3	
9.	10544-50-0	Sulfur, mol. (S8)	3.616	3.64	
10.	10363-27-6	Cyclooctanone, 2-methyl-	5.538	21.5	

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW58-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2081

Matrix: Water

Lab Sample ID: 20606150917

Sample wt/vol: 1000 Units: mL

Date Collected: 06/15/06 Time: 1005

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 1951

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: µg/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-53-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-05-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0



## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GW58-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2081  
 Matrix: Water Lab Sample ID: 20606150917  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/15/06 Time: 1005  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 1951  
 Concentrated Extract Volume: 1000 (μL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (μL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0 <del>1.35</del>	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW58-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2081

Matrix: Water

Lab Sample ID: 20606150917

Sample wt/vol: 1000

Units: mL

Date Collected: 06/15/06

Time: 1005

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/21/06

Time: 1951

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume:

1.0

(µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: µg/L

Prep Batch: 325847

Analytical Batch: 326170

CAS NO. COMPOUND

RESULT

Q

MDL

RL

86-30-6 N-Nitrosodiphenylamine

10.0

U

0.010

10.0

95-48-7 o-Cresol

10.0

U

0.010

10.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: Water  
 Sample wt/vol: \_\_\_\_\_ Units: \_\_\_\_\_  
 Level: (low/med) \_\_\_\_\_  
 % Moisture: not dec.  
 GC Column: DB-5MS-30M ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SK-GW58-1018  
 Contract: \_\_\_\_\_  
 Lab File ID: 2060621/B2081  
 Lab Sample ID: 20606150917  
 Date Collected: 06/15/06 Time: 1005  
 Date Received: 06/16/06  
 Date Extracted: 6/16/06  
 Date Analyzed: 06/21/06 Time: 1951  
 Dilution Factor: 1 Analyst: JAR3  
 Prep Method: OLM 4.2 SVOA  
 Analytical Method: SW-846 8270C OLM 4.2  
 Instrument ID: MSSV3

Number TICs Found: 9

CONCENTRATION UNITS: ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.335	11.6	
2.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	21.7	
3.	75-09-2	Methylene Chloride	.792	.789	
4.	115-18-4	3-Buten-2-ol, 2-methyl-	1.082	2.85	
5.	3083-25-8	Oxirane, (2,2,2-trichloroethyl	1.139	7.39	
6.	3891-98-3	Dodecane, 2,6,10-trimethyl-	3.159	.303	
7.	0-00-0	Isobornyl isovalerate	3.764	1.44	
8.	147-82-0	Benzenamine, 2,4,6-tribromo-	4.434	.583	
9.	63328-14-3	2-Isopropylpyrrolidine	5.501	8.02	

8/13/06  
ms

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GWEB-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060621/B2084

Matrix: Water

Lab Sample ID: 20606150922

Sample wt/vol: 1000 Units: mL

Date Collected: 06/15/06 Time: 1045

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/21/06 Time: 2037

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326170

**CAS NO. COMPOUND****RESULT****Q****MDL****RL**

95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
606-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GWEB-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2084  
 Matrix: Water Lab Sample ID: 20606150922  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/15/06 Time: 1045  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 2037  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326170

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-68-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SK-GWEB-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060621/B2084  
 Matrix: Water Lab Sample ID: 20606150922  
 Sample wt/vol: 1000 Units: mL Date Collected: 06/15/06 Time: 1045  
 Level: (low/med) LOW Date Received: 06/16/06  
 % Moisture: decanted: (Y/N) Date Extracted: 06/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/21/06 Time: 2037  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OLM4.2 SVOA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2  
 Instrument ID: MSSV3  
 Prep Batch: 325847 Analytical Batch: 326170  
 CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL  
Lab Code: LA024 Case No.:  
SAS No.: SDG No.: 206061509  
Matrix: Water  
Sample wt/vol: Units:  
Level: (low/med)  
% Moisture: not dec.  
GC Column: DB-5MS-30M ID: .25 (mm)  
Concentrated Extract Volume: 1000 (µL)  
Injection Volume: 1.0 (µL)  
GPC Cleanup: (Y/N) N pH:

Sample ID: SK-GWEB-1018  
Contract:  
Lab File ID: 2060621/B2084  
Lab Sample ID: 20606150922  
Date Collected: 06/15/06 Time: 1045  
Date Received: 06/16/06  
Date Extracted: 6/16/06  
Date Analyzed: 06/21/06 Time: 2037  
Dilution Factor: 1 Analyst: JAR3  
Prep Method: OLM 412 SUB A  
Analytical Method: SW-846-82700 OLM 0412  
Instrument ID: MSSV3

Number TICs Found: 10

CONCENTRATION UNITS: ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	110-82-7	Cyclohexane	.333	9.36	
2.	7390-81-0	Oxirane, hexadecyl-	8.478	24.4	
3.	994-05-8	Butane, 2-methoxy-2-methyl-	.347	23.3	
4.	96-19-5	1-Propene, 1,2,3-trichloro-	1.136	7.28	
5.	112-95-8	Eicosane	7.125	11.5	
6.	544-85-4	Dotriacontane	7.624	17.4	
7.	630-06-8	Hexatriacontane	7.868	6.52	
8.	2765-11-9	Pentadecanal-	7.985	13.9	
9.	25117-35-5	Octadecane, 5-methyl-	8.109	22.6	
10.	112-95-8	Eicosane	8.345	7.04	

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## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW63-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060622/B2088

Matrix: Water

Lab Sample ID: 20606150915

Sample wt/vol: 1000 Units: mL

Date Collected: 06/14/06 Time: 1455

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture: decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M ID: .25 (mm)

Date Analyzed: 06/22/06 Time: 1338

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: JAR3

Injection Volume: 1.0 (µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup (Y/N) N pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326221

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
95-95-4	2,4,5-Trichlorophenol	10.0	U	0.010	10.0
88-06-2	2,4,6-Trichlorophenol	10.0	U	0.010	10.0
120-83-2	2,4-Dichlorophenol	10.0	U	0.010	10.0
51-28-5	2,4-Dinitrophenol	25.0	U	0.010	25.0
121-14-2	2,4-Dinitrotoluene	10.0	U	0.010	10.0
603-20-2	2,6-Dinitrotoluene	10.0	U	0.010	10.0
91-58-7	2-Chloronaphthalene	10.0	U	0.010	10.0
95-57-8	2-Chlorophenol	10.0	U	0.010	10.0
91-57-6	2-Methylnaphthalene	10.0	U	0.010	10.0
88-74-4	2-Nitroaniline	25.0	U	0.010	25.0
88-75-5	2-Nitrophenol	10.0	U	0.010	10.0
91-94-1	3,3'-Dichlorobenzidine	10.0	U	0.010	10.0
99-09-2	3-Nitroaniline	25.0	U	0.010	25.0
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	0.010	25.0
59-50-7	4-Chloro-3-methylphenol	10.0	U	0.010	10.0
106-47-8	4-Chloroaniline	10.0	U	0.010	10.0
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	0.010	10.0
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	0.010	10.0
83-32-9	Acenaphthene	10.0	U	0.010	10.0
208-96-8	Acenaphthylene	10.0	U	0.010	10.0
120-12-7	Anthracene	10.0	U	0.010	10.0
56-55-3	Benzo(a)anthracene	10.0	U	0.010	10.0
50-32-8	Benzo(a)pyrene	10.0	U	0.010	10.0
205-99-2	Benzo(b)fluoranthene	10.0	U	0.010	10.0
191-24-2	Benzo(g,h,i)perylene	10.0	U	0.010	10.0
207-08-9	Benzo(k)fluoranthene	10.0	U	0.010	10.0
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	0.010	10.0
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	0.010	10.0
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	0.010	10.0

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min



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SK-GW63-1018
Lab Code: LA024	Contract:
SAS No.:	Lab File ID: 2060622/B2088
SDG No.: 206061509	Lab Sample ID: 20606150915
Matrix: Water	Date Collected: 06/14/06 Time: 1455
Sample wt/vol: 1000 Units: mL	Date Received: 06/16/06
Level: (low/med) LOW	Date Extracted: 06/16/06
% Moisture:                      decanted: (Y/N)	Date Analyzed: 06/22/06 Time: 1338
GC Column: DB-5MS-30M ID: .25 (mm)	Dilution Factor: 1 Analyst: JAR3
Concentrated Extract Volume: 1000 (µL)	Prep Method: OLM4.2 SVOA
Injection Volume: 1.0 (µL)	Analytical Method: OLMO 4.2
GPC Cleanup: (Y/N) N pH:	Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847 Analytical Batch: 326221

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
117-81-7	bis(2-ethylhexyl)phthalate	10.0 <del>1.80</del>	JB	0.010	10.0
101-55-3	4-Bromophenyl-phenylether	10.0	U	0.010	10.0
85-58-7	Butylbenzylphthalate	10.0	U	0.010	10.0
86-74-8	Carbazole	10.0	U	0.010	10.0
218-01-9	Chrysene	10.0	U	0.010	10.0
84-74-2	Di-n-butylphthalate	10.0	U	0.010	10.0
117-84-0	Di-n-octylphthalate	10.0	U	0.010	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	0.010	10.0
132-64-9	Dibenzofuran	10.0	U	0.010	10.0
84-66-2	Diethylphthalate	10.0	U	0.010	10.0
131-11-3	Dimethyl-phthalate	10.0	U	0.010	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	0.010	10.0
206-44-0	Fluoranthene	10.0	U	0.010	10.0
86-73-7	Fluorene	10.0	U	0.010	10.0
118-74-1	Hexachlorobenzene	10.0	U	0.010	10.0
87-68-3	Hexachlorobutadiene	10.0	U	0.010	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	0.010	10.0
67-72-1	Hexachloroethane	10.0	U	0.010	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	0.010	10.0
78-59-1	Isophorone	10.0	U	0.010	10.0
91-20-3	Naphthalene	10.0	U	0.010	10.0
100-01-6	4-Nitroaniline	25.0	U	0.010	25.0
98-95-3	Nitrobenzene	10.0	U	0.010	10.0
100-02-7	4-Nitrophenol	25.0	U	0.010	25.0
87-86-5	Pentachlorophenol	25.0	U	0.010	25.0
85-01-8	Phenanthrene	10.0	U	0.010	10.0
108-95-2	Phenol	10.0	U	0.010	10.0
129-00-0	Pyrene	10.0	U	0.010	10.0
621-34-7	N-Nitroso-di-n-propylamine	10.0	U	0.010	10.0

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW63-1018

Lab Code: LA024

Case No.:

Contract:

SAS No.:

SDG No.: 206061509

Lab File ID: 2060622/B2088

Matrix: Water

Lab Sample ID: 20606150915

Sample wt/vol: 1000

Units: mL

Date Collected: 06/14/06

Time: 1455

Level: (low/med) LOW

Date Received: 06/16/06

% Moisture:

decanted: (Y/N)

Date Extracted: 06/16/06

GC Column: DB-5MS-30M

ID: .25

(mm)

Date Analyzed: 06/22/06

Time: 1338

Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1

Analyst: JAR3

Injection Volume: 1.0

(µL)

Prep Method: OLM4.2 SVOA

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Instrument ID: MSSV3

CONCENTRATION UNITS: ug/L

Prep Batch: 325847

Analytical Batch: 326221

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
86-30-6	N-Nitrosodiphenylamine	10.0	U	0.010	10.0
95-48-7	o-Cresol	10.0	U	0.010	10.0

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL Sample ID: SK-GW63-1018  
 Lab Code: LA024 Case No.: Contract:  
 SAS No.: SDG No.: 206061509 Lab File ID: 2060622/B2088  
 Matrix: Water Lab Sample ID: 20606150915  
 Sample wt/vol: Units: Date Collected: 06/14/06 Time: 1455  
 Level: (low/med) Date Received: 06/16/06  
 % Moisture: not dec. Date Extracted: 6/16/06  
 GC Column: DB-5MS-30M ID: .25 (mm) Date Analyzed: 06/22/06 Time: 1338  
 Concentrated Extract Volume: 1000 (µL) Dilution Factor: 1 Analyst: JAR3  
 Injection Volume: 1.0 (µL) Prep Method: OCM 4.2 SUSA  
 GPC Cleanup: (Y/N) N pH: Analytical Method: SW-846-8270C OCM 4.2  
 Instrument ID: MSSV3

Number TICs Found : 10

CONCENTRATION UNITS:ug/L

	CAS NO.	COMPOUND	RT	EST. CONC.	Q
1.	112-39-0	Hexadecanoic acid, methyl este	4.63	43.7	
2.	55682-92-3	Octacosanoic acid, methyl este	7.644	40.1	
3.	3389-71-7	Bicyclo[2.2.1]hepta-2,5-diene,	4.828	5.81	
4.	112-61-8	Octadecanoic acid, methyl este	5.118	30.2	
5.	0-00-0	10-Methylnonadecane	6.293	2.36	
6.	2433-97-8	Tricosanoic acid, methyl ester	6.369	5.35	
7.	630-06-8	Hexatriacontane	6.551	2.53	
8.	2442-49-1	Tetracosanoic acid, methyl est	6.628	14.9	
9.	55373-89-2	Pentacosanoic acid, methyl est	6.886	15.4	
10.	5802-82-4	Hexacosanoic acid, methyl este	7.141	16.5	

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: **GCAL**  
 Lab Code: **LA024** Case No.:  
 Matrix: **Water**  
 Sample wt/vol: **1000** Units: **mL**  
 Level: (low/med) **LOW**  
 % Moisture: **decanted: (Y/N)**  
 GC Column: ID: (mm)  
 Concentrated Extract Volume: **1000** (µL)  
 Soil Aliquot Volume: (µL)  
 Injection Volume: **1** (µL)  
 GPC Cleanup: (Y/N) **N** pH:  
 Prep Batch: **325849** Analytical Batch: **326218**

Sample ID: **SK-GW62A-1018**  
 Contract:  
 SAS No.: SDG No.: **206061509**  
 Lab Sample ID: **20606150901**  
 Date Collected: **06/14/06** Time: **1020**  
 Date Received: **06/15/06**  
 Date Extracted: **06/16/06**  
 Date Analyzed: **06/22/06** Time: **1653**  
 Dilution Factor: **1** Analyst: **DLB**  
 Prep Method: **OLM4.2 PEST/PCB**  
 Analytical Method: **OLMO 4.2**  
 Sulfur Cleanup: (Y/N) **N** Instrument ID: **GCS18A**

CONCENTRATION UNITS: **ug/L**

Lab File ID: **2060621/SV18A033**

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW06R-1018

Lab Code: LA024

Case No.:

Contract:

Matrix: Water

SAS No.:

SDG No.: 206061509

Sample wt/vol: 1000 Units: mL

Lab Sample ID: 20606150902

Level: (low/med) LOW

Date Collected: 06/13/06

Time: 1425

% Moisture: decanted: (Y/N)

Date Received: 06/15/06

GC Column: ID: (mm)

Date Extracted: 06/16/06

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 06/22/06

Time: 1712

Soil Aliquot Volume: (µL)

Dilution Factor: 1

Analyst: DLB

Injection Volume: 1 (µL)

Prep Method: OLM4.2 PEST/PCB

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Prep Batch: 325849 Analytical Batch: 326218

Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A034

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11134-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-85-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW07R-1018

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

Matrix: Water

SAS No.: \_\_\_\_\_ SDG No.: 206061509

Sample wt/vol: 1000 Units: mL

Lab Sample ID: 20606150903

Level: (low/med) LOW

Date Collected: 06/13/06 Time: 1500

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Received: 06/15/06

GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm)

Date Extracted: 06/16/06

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 06/22/06 Time: 1731

Soil Aliquot Volume: \_\_\_\_\_ (µL)

Dilution Factor: 1 Analyst: DLB

Injection Volume: 1 (µL)

Prep Method: OLM4.2 PEST/PCB

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: OLMO 4.2

Prep Batch: 325849 Analytical Batch: 326218

Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A035

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) \_\_\_\_\_  
 Concentrated Extract Volume: 1000 (µL) \_\_\_\_\_  
 Soil Aliquot Volume: \_\_\_\_\_ (µL) \_\_\_\_\_  
 Injection Volume: 1 (µL) \_\_\_\_\_  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_  
 Prep Batch: 325849 Analytical Batch: 326218

Sample ID: SK-GW59-1018  
 Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Lab Sample ID: 20606150904  
 Date Collected: 06/14/06 Time: 0955  
 Date Received: 06/15/06  
 Date Extracted: 06/16/06  
 Date Analyzed: 06/22/06 Time: 1750  
 Dilution Factor: 1 Analyst: DLB  
 Prep Method: OLM4.2 PEST/PCB  
 Analytical Method: OLMO 4.2  
 Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A  
 Lab File ID: 2060621/SV18A036

CCNCONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW64-1018

Lab Code: LA024

Case No.:

Contract:

Matrix: Water

SAS No.:

SDG No.: 206061509

Sample wt/vol: 1000

Units: mL

Lab Sample ID: 20606150905

Level: (low/med) LOW

Date Collected: 06/14/06

Time: 1040

% Moisture:

decanted: (Y/N)

Date Received: 06/15/06

GC Column:

ID:

(mm)

Date Extracted: 06/16/06

Concentrated Extract Volume: 1000

(µL)

Date Analyzed: 06/22/06

Time: 1808

Soil Aliquot Volume:

(µL)

Dilution Factor: 1

Analyst: DLB

Injection Volume: 1

(µL)

Prep Method: OLM4.2 PEST/PCB

GPC Cleanup: (Y/N) N

pH:

Analytical Method: OLMO 4.2

Prep Batch: 325849

Analytical Batch: 326218

Sulfur Cleanup: (Y/N) N

Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A037

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Soil Aliquot Volume: \_\_\_\_\_ (µL)  
 Injection Volume: 1 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_  
 Prep Batch: 325849 Analytical Batch: 326218

Sample ID: SK-GW60-1018  
 Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Lab Sample ID: 20606150906  
 Date Collected: 06/14/06 Time: 1005  
 Date Received: 06/15/06  
 Date Extracted: 06/16/06  
 Date Analyzed: 06/22/06 Time: 1827  
 Dilution Factor: 1 Analyst: DLB  
 Prep Method: OLM4.2 PEST/PCB  
 Analytical Method: OLMO 4.2  
 Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A  
 Lab File ID: 2060621/SV18A038

CCNCONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
80C1-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SK-GW61-1018

Lab Code: LA024

Case No.:

Contract:

Matrix: Water

SAS No.:

SDG No.: 206061509

Sample wt/vol: 1000 Units: mL

Lab Sample ID: 20606150914

Level: (low/med) LOW

Date Collected: 06/14/06

Time: 1425

% Moisture: decanted: (Y/N)

Date Received: 06/16/06

GC Column: ID: (mm)

Date Extracted: 06/16/06

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 06/22/06

Time: 1846

Scil Aliquot Volume: (µL)

Dilution Factor: 1

Analyst: DLB

Injection Volume: 1 (µL)

Prep Method: OLM4.2 PEST/PCB

GPC Cleanup: (Y/N) N pH:

Analytical Method: OLMO 4.2

Prep Batch: 325849 Analytical Batch: 326218

Sulfur Cleanup: (Y/N) N

Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A039

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.00300	J	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

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Sample ID: SK-GW63-1018

Contract:

SAS No.:                      SDG No.: 206061509

Lab Sample ID: 20606150915

Date Collected: 06/14/06 Time: 1455

Date Received: 06/16/06

Date Extracted: 06/16/06

Date Analyzed: 06/22/06 Time: 1904

Dilution Factor: 1 Analyst: DLB

Prep Method: OLM4.2 PEST/PCB

Analytical Method: OLMO 4.2

Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A

Lab File ID: 2060621/SV18A040

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ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>GCAL</u>	Sample ID: <u>SK-GW63DUPE-1018</u>
Lab Code: <u>LA024</u> Case No.: _____	Contract: _____
Matrix: <u>Water</u>	SAS No.: _____ SDG No.: <u>206061509</u>
Sample wt/vol: <u>1000</u> Units: <u>mL</u>	Lab Sample ID: <u>20606150916</u>
Level: (low/med) <u>LOW</u>	Date Collected: <u>06/14/06</u> Time: <u>1505</u>
% Moisture: _____ decanted: (Y/N) _____	Date Received: <u>06/16/06</u>
GC Column: _____ ID: _____ (mm)	Date Extracted: <u>06/16/06</u>
Concentrated Extract Volume: <u>1000</u> (µL)	Date Analyzed: <u>06/22/06</u> Time: <u>1923</u>
Soil Aliquot Volume: _____ (µL)	Dilution Factor: <u>1</u> Analyst: <u>DLB</u>
Injection Volume: <u>1</u> (µL)	Prep Method: <u>OLM4.2 PEST/PCB</u>
GPC Cleanup: (Y/N) <u>N</u> pH: _____	Analytical Method: <u>OLMO 4.2</u>
Prep Batch: <u>325849</u> Analytical Batch: <u>326218</u>	Sulfur Cleanup: (Y/N) <u>N</u> Instrument ID: <u>GCS18A</u>
CONCENTRATION UNITS: <u>ug/L</u>	Lab File ID: <u>2060621/SV18A041</u>

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Soil Aliquot Volume: \_\_\_\_\_ (µL)  
 Injection Volume: 1 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_  
 Prep Batch: 325849 Analytical Batch: 326218

Sample ID: SK-GW58-1018  
 Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Lab Sample ID: 20606150917  
 Date Collected: 06/15/06 Time: 1005  
 Date Received: 06/16/06  
 Date Extracted: 06/16/06  
 Date Analyzed: 06/22/06 Time: 2038  
 Dilution Factor: 1 Analyst: DLB  
 Prep Method: OLM4.2 PEST/PCB  
 Analytical Method: OLMO 4.2  
 Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A  
 Lab File ID: 2060621/SV18A045

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
1* 104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
7421-93-4	Endrin aldehyde	0.00110	J P	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.00230	J	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

8/22/06  
MPC

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
Lab Code: LA024 Case No.:  
Matrix: Water  
Sample wt/vol: 1000 Units: mL  
Level: (low/med) LOW  
% Moisture: decanted: (Y/N)  
GC Column: ID: (mm)  
Concentrated Extract Volume: 1000 (µL)  
Soil Aliquot Volume: (µL)  
Injection Volume: 1 (µL)  
GPC Cleanup: (Y/N) N pH:  
Prep Batch: 325849 Analytical Batch: 326218

Sample ID: SK-GWEB-1018  
Contract:  
SAS No.: SDG No.: 206061509  
Lab Sample ID: 20606150922  
Date Collected: 06/15/06 Time: 1045  
Date Received: 06/16/06  
Date Extracted: 06/16/06  
Date Analyzed: 06/22/06 Time: 2134  
Dilution Factor: 1 Analyst: DLB  
Prep Method: OLM4.2 PEST/PCB  
Analytical Method: OLMO 4.2  
Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A

CONCENTRATION UNITS: ug/L

Lab File ID: 2060621/SV18A048

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.00120	J	0.000100	0.100
50-29-3	4,4'-DDT	0.00450	J P	0.000100	0.100
309-00-2	Aldrin	0.00280	J	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.00610	J	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5103-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.00610	J	0.000100	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.00230	J P	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
319-84-6	alpha-BHC	0.050	U	0.000100	0.050
5103-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.00390	J	0.000100	0.050
58-89-9	gamma-BHC (Lindane)	0.00220	J	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050

8/22/06

1D  
ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Soil Aliquot Volume: \_\_\_\_\_ (µL)  
 Injection Volume: 1 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_  
 Prep Batch: 326381 Analytical Batch: 326218

Sample ID: SK-GW63DUPE-1018 (RE)  
 Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Lab Sample ID: 20606150930  
 Date Collected: 06/14/06 Time: 1505  
 Date Received: 06/16/06  
 Date Extracted: 06/23/06  
 Date Analyzed: 06/26/06 Time: 1142  
 Dilution Factor: 1 Analyst: DLB  
 Prep Method: OLM4.2 PEST/PCB  
 Analytical Method: OLMO 4.2  
 Sulfur Cleanup: (Y/N) N Instrument ID: GCS18A  
 Lab File ID: 2060621/SV18A054

CONCENTRATION UNITS: ug/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
1031-07-8	Endosulfan sulfate	0.100	U	0.000100	0.100
72-55-9	4,4'-DDE	0.100	U	0.000100	0.100
50-29-3	4,4'-DDT	0.100	U	0.000100	0.100
309-00-2	Aldrin	0.050	U	0.000100	0.050
12672-29-6	Aroclor-1248	1.00	U	0.000100	1.00
11097-69-1	Aroclor-1254	1.00	U	0.000100	1.00
11096-82-5	Aroclor-1260	1.00	U	0.000100	1.00
60-57-1	Dieldrin	0.100	U	0.000100	0.100
72-54-8	4,4'-DDD	0.100	U	0.000100	0.100
33213-65-9	Endosulfan II	0.100	U	0.000100	0.100
5'-03-74-2	gamma-Chlordane	0.050	U	0.000100	0.050
72-20-8	Endrin	0.100	U	0.000100	0.100
5'-03-71-9	alpha-Chlordane	0.050	U	0.000100	0.050
53494-70-5	Endrin ketone	0.100	U	0.000100	0.100
76-44-8	Heptachlor	0.050	U	0.000100	0.050
1024-57-3	Heptachlor epoxide	0.050	U	0.000100	0.050
72-43-5	Methoxychlor	0.500	U	0.000100	0.500
8001-35-2	Toxaphene	5.00	U	0.000100	5.00
3'-9-84-6	alpha-BHC	0.050	U	0.000100	0.050
74-21-93-4	Endrin aldehyde	0.100	U	0.000100	0.100
58-89-9	gamma-BHC (Lindane)	0.050	U	0.000100	0.050
959-98-8	Endosulfan I	0.050	U	0.000100	0.050
319-86-8	delta-BHC	0.050	U	0.000100	0.050
319-85-7	beta-BHC	0.050	U	0.000100	0.050
12674-11-2	Aroclor-1016	1.00	U	0.000100	1.00
11104-28-2	Aroclor-1221	2.00	U	0.000100	2.00
53469-21-9	Aroclor-1242	1.00	U	0.000100	1.00
11141-16-5	Aroclor-1232	1.00	U	0.000100	1.00

R

8/23/06  
mm

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW62A-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: ( soil / water ) Water Lab Sample ID: 20606150901  
 Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
 % Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26900		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	8.6	B		P
7440-39-3	Barium	482			P
7440-41-7	Beryllium	1.4	B		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	490000			P
7440-47-3	Chromium	55.6		E	P
7440-48-4	Cobalt	30.7	B		P
7440-50-8	Copper	29.6			P
7439-89-6	Iron	64400			P
7439-92-1	Lead	52.2			P
7439-95-4	Magnesium	99500			P
7439-96-5	Manganese	2620			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	68.4			P
7440-09-7	Potassium	14000		E	P
7782-49-2	Selenium	5.0	B		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	109000			P
7440-28-0	Thallium	2.6	U	N	P
7440-32-6	Titanium	269			P
7440-62-2	Vanadium	15.9	B		P
7440-66-6	Zinc	184		E	P
57-12-5	Cyanide	0.6	U		AS

J

J

J

UJ

J

8/25/06  
me

Color Before: DK.BROWN Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: DK.BROWN Clarity After: CLEAR Artifacts: \_\_\_\_\_  
 Comments: \_\_\_\_\_



U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW06R-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: ( soil / water ) Water Lab Sample ID: 20606150902  
 Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
 % Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5720		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	6.3	B		P
7440-39-3	Barium	329			P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	210000			P
7440-47-3	Chromium	11.9		E	P
7440-48-4	Cobalt	9.0	B		P
7440-50-8	Copper	4.1	B		P
7439-89-6	Iron	15100			P
7439-92-1	Lead	12.8			P
7439-95-4	Magnesium	47400			P
7439-96-5	Manganese	1050			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	11.5	B		P
7440-09-7	Potassium	3700	B	E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	19500			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	36.4		E	P
57-12-5	Cyanide	0.6	U		AS

8/29/06  
AK

Color Before: LT. YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: LT. YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_  
 Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW07R-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150903  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8110		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	9.6	B		P
7440-39-3	Barium	388			P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	248000			P
7440-47-3	Chromium	12.8		E	P
7440-48-4	Cobalt	9.3	B		P
7440-50-8	Copper	11.1	B		P
7439-89-6	Iron	24600			P
7439-92-1	Lead	11.5			P
7439-95-4	Magnesium	49400			P
7439-96-5	Manganese	2940			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	16.8	B		P
7440-09-7	Potassium	4400	B	E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	27600			P
7440-28-0	Thallium	2.6	U	N	P
7440-52-2	Vanadium	1.2	U		P
7440-66-6	Zinc	46.5		E	P
57-12-5	Cyanide	1.3	B		AS

Color Before: LT.YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: LT.YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW59-1018

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: ( soil / water ) Water Lab Sample ID: 20606150904

Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3210		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	91.9	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	206000			P
7440-47-3	Chromium	12.1		E	P
7440-48-4	Cobalt	4.4	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	8240			P
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	41100			P
7439-96-5	Manganese	573			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	11.3	B		P
7440-09-7	Potassium	25300		E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	105000			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	20.1		E	P
57-12-5	Cyanide	0.8	B		AS

8/27/06  
mm

Color Before: LT. YELLOW

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: LT. YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW64-1018

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061509

Matrix: ( soil / water ) Water

Lab Sample ID: 20606150905

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/15/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6580		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	58.2	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	194000			P
7440-47-3	Chromium	13.5		E	P
7440-48-4	Cobalt	7.9	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	14900			P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	59400			P
7439-96-5	Manganese	1190			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	15.9	B		P
7440-09-7	Potassium	9990		E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	41400			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	31.9		E	P
57-12-5	Cyanide	0.7	B		AS

Color Before: LT. YELLOW

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: LT. YELLOW

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW62A-1018 (DISS)

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061509

Matrix: ( soil / water ) Water

Lab Sample ID: 20606150909

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/15/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.8	B	<del>P</del>	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	102	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	127000			P
7440-47-3	Chromium	3.8	B	<del>P</del>	P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	15.5	B		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	46800			P
7439-96-5	Manganese	29.5			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.9	B		P
7440-09-7	Potassium	9000		<del>P</del>	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	101000			P
7440-28-0	Thallium	2.6	U	<del>P</del>	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	4.9	B	<del>P</del>	P

U.S.  
U.S.

8/27/06  
m.e.

Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW06R-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150910  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U	<del>E</del>	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	212			P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	175000			P
7440-47-3	Chromium	2.1	B	<del>E</del>	P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	193			P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	30400			P
7439-96-5	Manganese	275			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.6	B		P
7440-09-7	Potassium	2420	B	<del>E</del>	P
7732-49-2	Selenium	4.9	U	<del>N</del>	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	19300			P
7440-28-0	Thallium	2.6	U	<del>N</del>	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U	<del>E</del>	P

45  
45

8/29/06  
JL

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW07R-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150911  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U	<del>E</del>	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	138	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	190000			P
7440-47-3	Chromium	1.3	B	<del>E</del>	P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	29900			P
7439-96-5	Manganese	2090			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	4.2	B		P
7440-09-7	Potassium	2610	B	<del>E</del>	P
7732-49-2	Selenium	4.9	U	<del>N</del>	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	28300			P
7440-28-0	Thallium	2.6	U	<del>N</del>	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U	<del>E</del>	P

3/21/06  
MPL

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW59-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: ( soil / water ) Water Lab Sample ID: 20606150912

Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U	<del>E</del>	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	38.7	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	188000			P
7440-47-3	Chromium	3.2	B	<del>E</del>	P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	38500			P
7439-96-5	Manganese	4.4	B		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.8	B		P
7440-09-7	Potassium	22900		<del>E</del>	P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	101000			P
7440-28-0	Thallium	2.6	U	<del>N</del>	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U	<del>E</del>	P

43  
45

8/29/06  
ms

Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:



U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW64-1018 (DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150913  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/15/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U	<del>E</del>	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	35.0	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	163000			P
7440-47-3	Chromium	4.2	B	<del>E</del>	P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	52400			P
7439-96-5	Manganese	25.0			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	8910		<del>E</del>	P
7782-49-2	Selenium	4.9	U	<del>N</del>	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	42800			P
7440-28-0	Thallium	2.6	U	<del>N</del>	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U	<del>E</del>	P

8/22/06  
mca

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:

EPA SAMPLE NO.

SK-GW61-1018

Lab Name: GCAL Contract:   
Lab Code: LA024 Case No.:  SAS No.:  SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150914  
Level: ( low / med )  Date Received: 06/16/06  
% Solids:

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3800		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	5.3	B		P
7440-39-3	Barium	81.3	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	250000			P
7440-47-3	Chromium	10.1		E	P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	11100			P
7439-92-1	Lead	14.4			P
7439-95-4	Magnesium	53600			P
7439-96-5	Manganese	750			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	11.2	B		P
7440-09-7	Potassium	7550		E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	39500			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	25.4		E	P
57-12-5	Cyanide	0.6	U		AS

8/23/06  
MK

Color Before: LT.YELLOW      Clarity Before: CLEAR      Texture: \_\_\_\_\_

Color After: LT.YELLOW      Clarity After: CLEAR      Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW63-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150915  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26400		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	15.5			P
7440-39-3	Barium	204			P
7440-41-7	Beryllium	1.4	B		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	412000			P
7440-47-3	Chromium	36.5		E	P
7440-48-4	Cobalt	26.2	B		P
7440-50-8	Copper	22.1	B		P
7439-89-6	Iron	56900			P
7439-92-1	Lead	40.1			P
7439-95-4	Magnesium	96100			P
7439-96-5	Manganese	3250			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	51.5			P
7440-09-7	Potassium	12400		E	P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	37900			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	12.6	B		P
7440-66-6	Zinc	148		E	P
57-12-5	Cyanide	0.7	B		AS

J

J

J  
45  
43

45

J

8/29/06  
ms

Color Before: DK.BROWN Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: DK.BROWN Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW63DUPE-1018

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: ( soil / water ) Water Lab Sample ID: 20606150916

Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18600		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	5.1	B		P
7440-39-3	Barium	154	B		P
7440-41-7	Beryllium	0.9	B		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	323000			P
7440-47-3	Chromium	25.7		E	P
7440-48-4	Cobalt	18.6	B		P
7440-50-8	Copper	16.2	B		P
7439-89-6	Iron	39400			P
7439-92-1	Lead	30.8			P
7439-95-4	Magnesium	76200			P
7439-96-5	Manganese	2570			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	37.2	B		P
7440-09-7	Potassium	10500		E	P
7762-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	33100			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	109		E	P
57-12-5	Cyanide	0.6	U		AS

8/29/06  
mm

Color Before: DK.BROWN

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: DK.BROWN

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW58-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
 Matrix: ( soil / water ) Water Lab Sample ID: 20606150917  
 Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06  
 % Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14100		E	P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	11.6			P
7440-39-3	Barium	298			P
7440-41-7	Beryllium	0.8	B		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	240000			P
7440-47-3	Chromium	30.8		E	P
7440-48-4	Cobalt	12.9	B		P
7440-50-8	Copper	15.1	B		P
7439-89-6	Iron	33500			P
7439-92-1	Lead	19.8			P
7439-95-4	Magnesium	62000			P
7439-96-5	Manganese	920			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	30.1	B		P
7440-09-7	Potassium	7900		E	P
7732-49-2	Selenium	4.9	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	29200			P
7440-28-0	Thallium	2.6	U	N	P
7440-52-2	Vanadium	1.2	U		P
7440-66-6	Zinc	83.9		E	P
57-12-5	Cyanide	0.6	U		AS

8/25/06  
m

Cclor Before: LT.BROWN Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Cclor After: LT.BROWN Clarity After: CLEAR Artifacts: \_\_\_\_\_  
 Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GWEB-1018

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150922  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06  
% Solids: \_\_\_\_\_  
Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.8	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	0.2	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	36.6	B		P
7440-47-3	Chromium	0.4	U		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	19.8	U		P
7439-96-5	Manganese	0.3	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	64.8	B		P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	49.1	U		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P
57-12-5	Cyanide	0.6	U		AS

45

8/29/06 m2

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments: \_\_\_\_\_

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW61-1018(DISS)

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 206061509

Matrix: ( soil / water ) Water

Lab Sample ID: 20606150923

Level: ( low / med ) \_\_\_\_\_

Date Received: 06/16/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	46.6	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	237000			P
7440-47-3	Chromium	3.8	B		P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	641			P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	49000			P
7439-96-5	Manganese	617			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	3.5	B		P
7440-09-7	Potassium	6730			P
7732-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	41300			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P

US

5/25/06  
m

Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW63-1018(DISS)

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: ( soil / water ) Water Lab Sample ID: 20606150924

Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.3	B		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	29.1	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	173000			P
7440-47-3	Chromium	2.5	B		P
7440-48-4	Cobalt	1.5	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	189			P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	38400			P
7439-96-5	Manganese	1200			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium	5550			P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	30000			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P

US

8/29/06  
mcr

Color Before: COLORLESS

Clarity Before: CLEAR

Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:



U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW63DUPE-1018(DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150925  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	34.8	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	204000			P
7440-47-3	Chromium	2.8	B		P
7440-48-4	Cobalt	1.7	B		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	209			P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	44400			P
7439-96-5	Manganese	1400			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium	6630			P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	35600			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P

US

8/28/06  
m

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GW58-1018(DISS)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509  
Matrix: ( soil / water ) Water Lab Sample ID: 20606150926  
Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06  
% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	230			P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	101000			P
7440-47-3	Chromium	2.7	B		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	826			P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	34700			P
7439-96-5	Manganese	187			P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	1.0	B		P
7440-09-7	Potassium	5160			P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	36700			P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	1.2	U		P
7440-66-6	Zinc	0.7	U		P

US

8/29/08  
msm

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_  
Comments:

U.S. EPA - CLP  
1  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SK-GWEB-1018(DISS)

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 206061509

Matrix: ( soil / water ) Water Lab Sample ID: 20606150929

Level: ( low / med ) \_\_\_\_\_ Date Received: 06/16/06

% Solids: \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight) : ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.8	U		P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	0.1	B		P
7440-41-7	Beryllium	0.5	U		P
7440-43-9	Cadmium	0.1	U		P
7440-70-2	Calcium	81.3	B		P
7440-47-3	Chromium	0.4	U		P
7440-48-4	Cobalt	0.7	U		P
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	12.9	U		P
7439-92-1	Lead	1.8	U		P
7439-95-4	Magnesium	23.2	B		P
7439-96-5	Manganese	0.3	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.5	U		P
7440-09-7	Potassium	42.6	U		P
7782-49-2	Selenium	4.9	U	N	P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	49.1	U		P
7440-28-0	Thallium	2.6	U		P
7440-62-2	Vanadium	2.0	B		P
7440-66-6	Zinc	0.7	U		P

Color Before: COLORLESS

Clarity Before: CLEAR

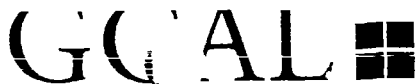
Texture: \_\_\_\_\_

Color After: COLORLESS

Clarity After: CLEAR

Artifacts: \_\_\_\_\_

Comments:



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# CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech

4347

206061509

6-29-06

Client Name

Client #

Workorder #

Due Date

## Report to:

## Bill to:

## Analytical Requests & Method

## Lab use only:

Client: Earth Tech  
Address: 2313 Progress Drive  
Helen, KY 41042  
Contact: Pat Higgins  
Phone: 855 442-2300  
Fax: 855 442-2311

Client:   
Address: Clean  
Contact: Springs  
Phone: contract  
Fax:

Custody Seal

used ☒ yes ☐ no

in tact ☒ yes ☐ no

Temperature °C 3

P.O. Number 54280.01 Project Name/Number Liner Landfill - 2nd Qtr. 2006

Sampled By: Pat Higgins & Dallas Grimes

Matrix <sup>1</sup>	Date	Time (2400)	Coop	Grab	Sample Description	Preservatives	No. Containers	Volatiles	Semi-Volatiles	Pesticides	Total Metals	Dissolved Metals	Cyanide
GW	6/14	1000		X	Sh-GW62A-1012	Various	9	X	X	X	X	X	X
GW	6/14	1425			Sh-GW06R-1012	HCL	3	X					
GW	6/14	1500			Sh-GW07R-1012	HCL	3	X					
GW	6/14	0955			Sh-GW59-1012			X					
GW	6/14	1005			SL-GW60-1012			X					
GW	6/14	1040			SL-GW64-1012			X					
GW					Sh-GWTR-1012			X					

Remarks:

Lab ID

Refer to Table 7 (TCL) and Table 8 (TAC) of the Final Dism Plan for the complete list of analytes

\* Low Sample Volume for GW62A - only 1 500cc jar collected

WHBLK - 8

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Received by: (Signature)

Date: 6/17/06 Time: 1800

Note: \* Standard Turnaround

Relinquished by: (Signature)

Received by: (Signature)

Date: 6-15-06 Time: 940

\* Samples Sent via FedEx - Priority overnight Delivery

Relinquished by: (Signature)

Received by: (Signature)

Date: Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air han

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11 96

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Phone 225.769.4900 • Fax 225.767.5717

Lab use only

Earth Tech  
Client Name

4342

Client #

206061509

Workorder #

6-24-06

Due Date

## Report to:

## Bill to:

## Analytical Requests &amp; Method

## Lab use only:

Client: Earth Tech  
Address: 2373 Progress Drive  
Hoboken, KY 41049  
Contact: Pat Higgins  
Phone: 859 412-2300  
Fax: 859 412-2311

Client: Glenn Springs  
Address: (contract)  
Contact: (contract)  
Phone: (contract)  
Fax: (contract)

## Custody Seal

used ☒ yes ☐ noin tact ☒ yes ☐ no

Temperature °C

3

P.O. Number

54280.01

Project Name/Number

Slinner Landfill - 2nd Qtr. 2006

Sampled By:

Pat Higgins &amp; Dallas Grimes

Matrix	Date	Time (2400)	Code	Sample Description	Preservatives	No Containers	Volatiles	Semi-Volatiles	PCPs	Pesticides	Total Metals	Dissolved Metals	Cyanide	Remarks	Lab ID
GW	6/13	1425	X	Sk-GW06R- <del>TOTOB</del> 1016	Various	7	X	X	X	X	X	X	X	Refer to	2, 10
GW	6/13	1300	X	Sk-GW07R- 1018	Various	7	X	X	X	X	X	X	X	Table 7 (TCL)	3, 11
														and Table 8	
														(TAL) of the	
														Final OCM	
														Plan for the	
														complete list	
														of analytes	

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax with changes.

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11 98

000960

## CHAIN OF CUSTODY RECORD

Lab use only

# Earth Tech

4342

206061504

6-29-06

Client Name

Client #

Workorder #

Due Date

Report to:				Bill to:				Analytical Requests & Method								Lab use only:	
Client: Earth Tech Address: 2773 Progress Drive Helena, MT 59604 Contact: Pat Higgins Phone: 855-442-2300 Fax: 855-442-2311				Client: Address: Glen Springs Contract Contact: Phone: Fax:												Custody Seal used <input type="checkbox"/> yes <input checked="" type="checkbox"/> no in tact <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Temperature °C _____	
P.O. Number S9280.01				Project Name/Number Skinner Landfill - 2nd Qtr. 2006													
Sampled By: Pat Higgins ; Dallas Gaines																	
Matrix <sup>a</sup>	Date	Time (2400)	COD	GAB	Sample Description	Preservatives	No Containers	Volatiles	Semi-Volatiles	PBB's	Pesticides	Total Metals	Dissolved Metals	Residue	Remarks:	Lab ID	
GW	6/14	0655	X		Sk-GW59-1018	Various	7		X	X	X	X	X	X	Refer to	/ DS	
GW	6/14	1090	X		Sh-GWG4-1018	I	7		X	X	X	X	X	X	Table 7(TCC)	4 12	
GW	6/14	1005	X		Sl-GW-60-1018	I	2		X	X	X				and Table 8	5 B	
															(TAL) of The Final dim Plan for The Complete list of analytes	6	
* Low sample volume for GW-60 only 1 pest/PBB Jar and 1 Semi jar No metals collected																	
Turn Around Time: <input type="checkbox"/> 24-48 hrs. <input type="checkbox"/> 3 days <input type="checkbox"/> 1 week <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other _____																	
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>FED EX</i>	Date: 6/14/06	Time: 1800														
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>MK</i>	Date: 6-15-06	Time: 940														
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:														

Matrix<sup>1</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube A = air han

We cannot accept verbal changes. NI- - - -

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11 98

## CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech

4342

206061504

6-30-06

Client Name

Client #

Workorder #

Due Date

### Report to:

### Bill to:

### Analytical Requests & Method

### Lab use only:

Client: Earth Tech  
Address: 2575 Progress Drive  
Hellman LA 70443  
Contact: Pat Higgins  
Phone: 854 412-2300  
Fax: 854 442-2311

Client: \_\_\_\_\_  
Address: Glenn  
Spring  
Contact: \_\_\_\_\_  
Phone: Contract  
Fax: \_\_\_\_\_

### Custody Seal

used ☒ yes ☐ no  
in tact ☒ yes ☐ no

Temperature °C 1

P.O. Number 54280.01 Project Name/Number Shinner Landfill - 2nd Qtr. 2006

Sampled By: Pat Higgins, Dallas, Grimes

Matrix <sup>1</sup>	Date	Time (2400)	C	G	Sample Description	Preservatives	No Containers	Volatiles	Semi-Volatiles	PCBs	Pesticides	Total Metals	Dissolved Metals	Cyanide	Remarks:	Lab ID
GW	6/14	1425		X	Sk-GW61-1018	Various	10	X	X	X	X	X	X	X	Refer to	14, 23
GW	6/14	1455		X	Sk-GW63 1018	Itcl	3	X							Table 7 (TCL)	15
GW	6/14	1505		X	Sk-GW63 Dups-1018	Itcl	3	X							and Table 8	16
GW	6/15	1005		X	Sk-GW50-1018	Itcl	3	X							(TAC) of the	17
GW	6/15	1010		X	Sk-GW50 MS-1018	Itcl	3	X							Final D.M	18
GW	6/15	1020		X	Sk-GW50 MSB-1018	Itcl	3	X							plan for a	19
				X	SK-GWTTB-1018	HCL	3	X							Complete list	21
	6/15	1005		X	Sk-GWED-1018	Itcl	3	X							of analytes	22

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other \_\_\_\_\_

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

\* Standard Turnaround  
\* Samples sent via FED EX - Priority Overnight Delivery

## Lab use only

Earth Tech  
Client Name

4342

206061504

6-30-06

Client #

Workorder #

Due Date

[illegible]

Matrix<sup>1</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (202) 767-5747.

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CAL-06 11 98



## CHAIN OF CUSTODY RECORD

Lab use only

English Tech  
Client Name

4342  
Client #

206061509

Workorder #

6-30-06

Due Date

Report to:		Bill to:		Analytical Requests & Method										Lab use only:		
Client: Earth Tech		Client:												Custody Seal		
Address: 2373 Progress Drive		Address:												used <input type="checkbox"/> yes <input type="checkbox"/> no		
Helen, KY 41648		Helen Springs Contract												in tact <input checked="" type="checkbox"/> yes <input type="checkbox"/> no		
Contact: Pat Higgins		Contact:												Temperature °C 4		
Phone: 854 442-2300		Phone:														
Fax: 854 442-2311		Fax:														
P.O. Number		Project Name/Number														
54280-01		Shinner Landfill - 2nd Qtr. 2006														
Sampled By: Pat Higgins & Dallas Grimes																
Matrix	Date	Time (2400)	Code	Grab	Sample Description	Preservatives	No Containers	Volatiles	Semi-Volatiles	Pesticides	PCBs	Total Metals	Dissolved Metals	Cyanide	Remarks	Lab ID
LW	6/15	1000		X	Sh-LW 50% - 101%	Various	7	X	X	X	X	X	X	X	Peter to	17, 26
LW	6/15	1000		X	Sh-LW 50% - 101%	Various	7	X	X	X	X	X	X	X	Table 7 (TCL) and Table 8 (TAL) of the Final O&M Plan for a complete list of analytes	18, 27
Turn Around Time: <input type="checkbox"/> 24-48 hrs. <input type="checkbox"/> 3 days <input type="checkbox"/> 1 week <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other																
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:		Note: * Standard Turnaround * Samples Sent via FED EX - Priority Overnight Delivery By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.								
Pat Higgins		FED EX		6/15/06		1800										
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:										
FED EX		MAN		6-16-06		1800										
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:										

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

11 98



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7919 USHI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

# CHAIN OF CUSTODY RECORD

Lab use only

Earth Tech  
Client Name

4342  
Client #

206061509  
Workorder #

6-30-06  
Due Date

## Report to:

Client: Earth Tech  
Address: 2573 Progress Drive  
Helen, KY 41042  
Contact: Pat Higgins  
Phone: 659 442-2300  
Fax: 659 442-2311

## Bill to:

Client: Glenn  
Address: Springfield  
Contact: (contract)  
Phone:  
Fax:

## Analytical Requests & Method

Volatiles  
Semi-volatiles  
PCPs  
Pesticides  
Total Metals  
Dissolved Metals  
Cyanide

## Lab use only:

Custody Seal

used ☒ yes ☐ no

in tact ☒ yes ☐ no

Temperature °C

4

P.O. Number 54280.01 Project Name/Number Shiner Landfill- 2nd Qtr. 2006

Sampled By: Pat Higgins & Dallas Grimes

Matrix <sup>1</sup>	Date	Time (2400)	COED	G R A B	Sample Description	Preservatives	No Containers
SW	6/15	10:05		X	Sk-GW58-1018	Various	7
	6/15	10:05		X	Sk-GW58-7018	Various	7
GW	6/15	10:20		X	Sk-GW58, M.D.-1018	Various	7

Remarks:

Refer to Table 7 (TCL) and Table 8 (TAL) of the Final DIRM Plan for a complete list of analytes

Lab ID

1055

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Pat Higgins

Received by: (Signature)

FED EX

Date:

6/15/06

Time:

1200

Note:

\* Standard Turn-around

\* Samples sent via FedEx - Priority overnight delivery

Relinquished by: (Signature)

Feder

Received by: (Signature)

ML

Date:

6-16-06

Time:

1000

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

Matrix<sup>1</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

We cannot accept verbal changes. Please fax written changes to (225) 767-5717

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11 98